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REPORT

OF THE

PUBLIC SERVICE COMMISSION

FOR THE FIRST DISTRICT

OF THE

STATE OF NEW YORK

For the Six Months Ending December 31, 1907

Vol. I.

Report and Appendices A to O, inclusive

TRANSMITTED TO THE LEGISLATURE JANUARY 20, 1908

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IN SENATE

JANUARY 20, 1908.

REPORT OF THE PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT.

NEW YORK, *January* 20, 1908.

Honorable Lewis Stuyvesant Chanler, Lieutenant-Governor:

SIR.— The Public Service Commission for the First District of the State of New York herewith transmits to the Legislature its first report, covering the six months from July 1st to December 31st, 1907.

Very respectfully,

WILLIAM R. WILLCOX,
WILLIAM McCARROLL,
EDWARD M. BASSETT,
MILO R. MALTBIE,
JOHN E. EUSTIS,

Commissioners.

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REPORT.

NEW YORK CITY, *January* 1, 1908.

To the Honorable, the Legislature of the State of New York:

The Public Service Commission for the First District respectfully submits herewith its first report, covering the six months ending December 31, 1907, as required by statute.

The Public Service Commissions Law (chap. 429 of the Laws of 1907) received the approval of the Governor upon June 6, 1907, and took effect July 1st. Upon June 28th the Governor appointed the following Commissioners for the First District:

William R. Willcox, Chairman, to hold office until February 1, 1913,
William McCarroll, to hold office until February 1, 1912,
Edward M. Bassett, to hold office until February 1, 1911,
Milo R. Maltbie, to hold office until February 1, 1910,
John E. Eustis, to hold office until February 1, 1909,

and these appointments were duly confirmed by the Senate.

Upon July 1st, each of the Commissioners qualified by taking the constitutional oath of office. Temporarily the Commission established its headquarters in the offices previously occupied by the Rapid Transit Railroad Commissioners at No. 320 Broadway, New York City, Borough of Manhattan; but finding the available space inadequate for the performance of its work, the Commission subsequently removed all of its offices to the Tribune building, No. 154 Nassau street. Early in July, Mr. Travis H. Whitney was elected Secretary of the Commission and shortly thereafter Mr. Abel E. Blackmar was elected Counsel. Rules of procedure were also adopted and appear in full in an appendix.

Jurisdiction of Commission.— The Public Service Commissions Law is published in full as an appendix. In brief, it provides for the creation of two Public Service Commissions for the State of New York. The Public Service Commission for the First District has jurisdiction over the counties of New York, Kings,

Queens and Richmond — New York City. The Public Service Commission for the Second District has jurisdiction over the remainder of the State. Each consists of five men appointed by the Governor by and with the consent of the Senate, and after February 1, 1909, each appointee will serve for a period of five years.

The Public Service Commissions succeeded to the powers of the Railroad Commissioners, the Commission of Gas and Electricity and the State Inspector of Gas Meters. These bodies had jurisdiction over the entire State and ceased to exist upon June 30, 1907. All of their powers and duties within the area of Greater New York were transferred to the Public Service Commission for the First District. Many other functions which had not theretofore been exercised by any State or local authority were conferred upon the Commission, and thus it came to have the power to control, supervise, and regulate (see section 5 of the Act):

(1) Railroads and street railroads lying exclusively within that district.

(2) Street railroads any portion of whose lines lies within that district, and all transportation thereon.

(3) Such portion of the lines of any other railroad as lies within that district, so far as concerns the construction, maintenance, equipment, terminal facilities, and local transporation facilities, and local transportation of persons or property within that district.

(4) Any common carrier, operating or doing business exclusively within that district.

(5) The manufacture, sale or distribution of gas and electricity for light, heat and power in said district.

The Board of Rapid Transit Railroad Commissioners for New York City, was also abolished by the act, and its powers and duties transferred to the Public Service Commission for the First District. Thus, this Commission has a dual character. Upon the one hand, it has most full and complete powers of regulation over all public service corporations. Upon the other, it has the important task of planning and constructing, possibly also of equipping and operating, rapid transit lines, whether subway or elevated. So far as the transportation problem is concerned,

therefore, the Commission has two strings to its bow; it may build subways, as its predecessor did, the Rapid Transit Board; and it may order existing companies to increase their service, adjust fares and freight rates, improve their equipment, etc.— a function which neither the Rapid Transit Board nor the Railroad Commissioners had to the extent which this Commission now possesses and has been exercising for the past six months.

GENERAL REVIEW OF THE YEAR.

In subsequent chapters of this report, each phase of the work is fully discussed, but in order to assist one to gain a general view of the many functions exercised by the Commission and the large amount of work accomplished, a short general review is first given.

Subways Under Construction.— Upon entering office (July 1, 1907), the Commission found the Manhattan-Bronx subway (built under contract No. 1) almost completed. The main portion of the line was opened in 1904 and as each section had been completed, it had been put in operation. The Manhattan-Brooklyn subway (contract No. 2) had also been completed as far as the Battery and was being operated. Work was progressing upon an extension from Two Hundred and Thirtieth street to Van Cortlandt Park in the Bronx, which will cost about $700,000 when finished, and which will place one of the largest parks of the city within reach of the congested East Side and the whole West Side for a five-cent fare.

A ventilating system was being installed in the subway, at an expense of $500,000. Actual work was just beginning on the so-called Brooklyn subway loop, designed to connect the Brooklyn bridge, Manhattan bridge and the Williamsburg bridge, by a route through Centre street, Manhattan, at an estimated cost of $10,000,000. The tunnel portion of the Manhattan-Brooklyn subway, extending from the Battery to Borough Hall, Brooklyn, was nearing completion.

The Rapid Transit Board had authorized the drawing of a contract for certain changes in the subway at Ninety-sixth street whereby grade crossings would be eliminated. Realizing the importance of pushing all subway work to immediate completion, the Commission proceeded at once with this matter and se-

cured the approval of the Corporation Counsel and the Board of Estimate and Apportionment, which set aside $850,000 for the work. Consents of property owners are now being obtained and the requisite number has nearly been secured. The officials of the Interborough Company have testified that when this change is completed, it will then be possible to operate one-third more local trains during the rush hours than now pass this point.

The Commission found a great deal of criticism upon the part of merchants in Brooklyn because of the torn-up and obstructed condition of the streets, due to subway construction on Fulton street and Flatbush avenue. An engineer was detailed to see that the contractors keep the streets passable and that they carry on the work with a minimum interference with business.

Fourth Avenue Subway.— Before the Rapid Transit Board ceased to exist, it set a hearing for the 25th of July upon the forms of contracts for the so-called Fourth avenue subway in Brooklyn. This line was originally a portion of the "Tri-Borough route," extending from the southern part of Brooklyn, through Manhattan to the northern part of the Bronx, but the Rapid Transit Commission had asked the Board of Estimate to rescind its former determination upon this matter and approve only the portion from Manhattan bridge to Fort Hamilton and Coney Island.

After full discussion of the advisability of this subway the Commission determined that the plans should be continued. Upon the recommendation of its newly appointed chief engineer, the Commission deemed it advisable to change the plans so as to eliminate certain heavy grades, and also to increase the headroom in the subway from thirteen and a half to fourteen and a half feet. This last change will make it possible to operate steel cars used by suburban lines through the tunnel, and if found desirable when the line is constructed and ready for leasing to run it in connection with suburban roads, and thus bring the suburbanite from Long Island right into the heart of Manhattan. This was impossible under the plans as originally drawn.

These changes rendered necessary a complete redrawing of the plans and contracts and delayed to a certain extent advertising for bidders, but the alterations are a decided improvement

and it is now expected that the Commission will be ready to invite bidders toward the close of January. The completion of the subway, at least as far as Fortieth street, Brooklyn, may be expected by the time the Manhattan bridge is finished. In other words, the subway will be ready for operation as soon as the bridge by which the passengers are brought into Manhattan is completed.

In calling attention to this subway route, it should be noted that the Commission is proceeding under the "Elsberg amendments" to the Rapid Transit Act, i. e., contracts for construction only, and in small sections, will be let, whereas the contract for the present subway was for construction, equipment and operation in one.

Brooklyn Loop Lines.— The Commission has given a great deal of study to the plans for the subway loop which is to connect the three bridges on the Manhattan side, and for which contracts were let in June, 1907, just before this Commission came into office.

As planned, this subway contained a number of grades ranging from 4 to 5.5 per cent. In some instances they were so related as to increase the risk of collision unless the trains shall be run at considerable distances apart. The headroom was not sufficient to permit cars in the suburban service upon electrified steam roads to be operated through the loop. This would seriously interfere with its future usefulness and might prevent its being utilized to the greatest possible extent as a connection for future subways in Brooklyn and Queens.

A revised scheme had nearly been perfected at the close of the year whereby the steep grades would be eliminated in all but one instance, the headroom increased so as to allow for every possible use of the subway in the future, and a rearrangement of the tracks which would increase the facility of operation. The advantages of these changes are several. Not only will the safety of operation be increased, but also the carrying capacity of the loop, for it is estimated that 25 per cent. more trains can be run through it in a given time. The cost of operation will be reduced materially, and less expensive equipment can be used. The benefits of being able to use larger cars have been mentioned.

Canal Street Extension.— In addition to the changes indicated above, the Commission has directed that plans be prepared at once for a subway from the Manhattan bridge through Canal street to West street, there connecting with the ferries. According to the former plans for the Center street loop, no means had been provided for connecting any of the bridges with the present subway, the elevated roads, the new subway up Broadway or any future subways west of Broadway. Even the Fourth avenue subway from Brooklyn has been planned to run down Centre street without any connection with any subway or elevated road. Such a condition would have been most inconvenient and inadvisable, particularly in view of the fact that by building a line across town under Canal street, any person coming to Manhattan via the Manhattan bridge may change to the present subway, the proposed Broadway-Lexington avenue subway, each of the four subways to be built west of Broadway, and also to the elevated roads whose stations are immediately above. It will also be possible to make a physical connection with the Broadway-Lexington avenue route and other subways, so that cars could be run through from the Bronx to Fort Hamilton or Coney Island via Manhattan bridge and the Fourth avenue subway. This plan does not interfere with the connection with the Centre street loop, but merely provides for the running of certain trains from Brooklyn through to the North river and certain others down Centre street to City Hall. The estimated cost of this Canal street line complete is $7,000,000.

Broadway-Lexington Avenue System.—After careful study and investigation, this Commission has determined upon a new rapid transit route in Manhattan and the Bronx, running from the Battery up Greenwich and Vesey streets to the postoffice, thence up Broadway to Tenth street or thereabouts, thence under private property and public streets to Irving place, thence up Irving place and Lexington avenue to the Harlem river, thence under the Harlem river to One Hundred and Thirty-eighth street or thereabouts. Dividing here into two branches, one line will go up Mott avenue, Gerard avenue and Jerome avenue. The other line will pass east through One Hundred and Thirty-

eighth street to the Southern Boulevard and up the Southern Boulevard and Westchester avenue to Eastern Boulevard.

Although the details are not completed, the general plan provides that the subway will contain four tracks most of the way until it reaches One Hundred and Thirty-eighth street. The easterly fork will contain at least three tracks and likewise the westerly fork as far as Jerome avenue, where there will be four tracks again. This is considered wise because at some future time a subway will probably be built in Eighth avenue to connect with the line up Jerome avenue, and then four tracks will be needed to afford facilities to both lines. The whole line will be underground, except possibly the Southern Boulevard and Westchester avenue section. Some money would be saved by building an elevated road on Jerome avenue instead of a subway, but in view of the many obvious objections to an elevated road, in view of the important character of this thoroughfare, and of the small saving in cost when the expense of constructing the whole line is considered, a subway is planned through Jerome avenue.

The line thus planned can be connected with the New York Central Railroad at the Mott Haven station, at One Hundred and Thirty-eighth street and at Forty-second street, and suburban trains can be run through to the Battery via Broadway — a more direct route to downtown Manhattan than by the present subway.

The proposed line will also run close to the Steinway tunnel at Forty-second street and the Blackwell's Island bridge at Fifty-ninth street, so that by either route the residents of Queens will be able to reach the lower portion of Manhattan much more expeditiously than at present.

The value of the Broadway-Lexington avenue route both from the transit and from the financial standpoint is apparent. Below Fourteenth street it will run through the very heart of the commercial and office centres of the city. It will also tap the populous district between Forty-second street and the Harlem river, the residents of which at present can reach the lower Broadway district only by a circuitous route. The two branches in the Bronx will tap the sections which are most in need of transit facilites, for the Jerome avenue line has been urged for years, the Southern

Boulevard section will run through a district already well populated and the Westchester avenue section will open up an area which has not developed owing to the lack of transit facilities. Further, the directness of the line and the few curves (Lexington avenue is almost upon an exact line with Broadway) will safely allow cars to be run at high speed and will lower operating costs.

The estimated cost of the Broadway-Lexington avenue line, including the two branches in the Bronx, will be about $60,000,000. A communication will be sent early in January to the Board of Estimate asking its approval to this route.

The Rapid Transit Law.— At the present time, bonds issued for subway construction are reckoned as a part of the debt of the city in determining its debt limit, although the bonds so far issued are entirely for a self-supporting undertaking; that is, the contractor has undertaken and given security to pay the interest and a per cent. each year toward a sinking fund to retire the bonds. It will thus be seen that the taxpayers of the city are not and will not be called upon to pay a dollar, either as interest upon these bonds, or to secure their retirement upon their maturity.

Because of the financial condition of the city, and because of the present limitation upon the power of the Commission to secure the use of private capital in the construction of rapid transit routes, within the city of New York, the Commission makes the four following recommendations as to legislation, which are discussed more at length in a later portion of the report.

(1) A constitutional amendment exempting from the ten per cent. debt limit bonds for the construction of rapid transit lines, when, so far, and so long as such rapid transit lines shall be self-supporting.

(2) An amendment to the Rapid Transit Law providing that leases of extensions of rapid transit lines may be made to terminate at the same time as the original lease, this Commission having the power, in conjunction with the Board of Estimate and Apportionment, to fix the terms, conditions and compensation and to readjust the same each twenty or twenty-five years thereafter

(3) An amendment to the Rapid Transit Law which shall give the local authorities and this Commission the power to allow the construction and operation of rapid transit lines by

private companies upon the payment of part of the earnings to the city or other proper terms, and with a reservation to the city of the privilege to purchase at any time after a certain period of not more than twenty or twenty-five years and without any payment for the franchise itself; and

(4) An amendment to the Rapid Transit Law making it possible for the local authorities and this Commission to let contracts for operation for a longer period than twenty years, or else to make the lease terminable at any time after a certain period of not more than twenty years, with a provision that the equipment shall be purchased at a fair price by the city on the termination of the lease.

Eleventh Avenue.— Under the terms of the Saxe law as to the removal of steam railroads from streets in Manhattan, applying especially to the tracks of the New York Central, it devolved upon this Commission to cause condemnation proceedings to be instituted. The Rapid Transit Commission had failed, within the year fixed by the act, to reach an agreement with the company for the depression of the tracks, and condemnation of the rights of the company in the streets thereupon became mandatory. This Commission has caused to be prepared lists of permits granted by the local authorities for switches and connections, and has requested the Board of Estimate and Apportionment to revoke such permits. Subsequently maps were completed and the Corporation Counsel of the city formally directed to commence condemnation proceedings. This ends the duties of this Commission under the act. It has been conscious, however, of the fact that the public expects a practical solution to this perplexing problem, and it has therefore made a careful study of the entire problem, but is not ready as yet to make definite recommendations.

Corporations Supervised.— Passing now to the second broad division of powers, some idea of the length and breadth of this field may be gathered from the following facts, as reported by the companies themselves:

Within the first district there are sixteen gas companies, nine electric companies and three companies furnishing both gas and electricity, with 1,011,831 gas consumers and 87,745 consumers of electricity.

Total capitalization of these companies was as of June 30, 1907	$353,299,533 80
Their gross earnings from operation for the the year were	48,363,840 29
Expenditures for operation were	36,318,494 09
There was paid either as interest on bonds or dividends on stock	12,370,091 57

The amount of gas manufactured reached the total of 34,656,922,800 cubic feet. The kilowatt hours of the electricity produced were 424,027,824.

The following is a comparative table of assets and liabilities from the reports of the street surface, elevated and subway railroads under the jurisdiction of the Commission for the year ending June 30, 1907:

Cost of road and equipment	$459,802,017 89
Permanent investment, cash and other assets.	164,274,208 26
Total assets	$624,076,226 15
Capital stock issued	$270,617,350 00
Funded debt	250,977,663 17
Other liabilities	96,081,265 01
Total liabilities	$617,676,278 18
Excess of assets	$6,399,947 97

The following is a comparative statement from their reports of the income account for the year ending June 30, 1907, of such companies:

EARNINGS FROM OPERATION.

From passenger transportation	$65,568,031 89
From freight transportation	290,515 04
From express transportation	132,559 10
From mail transportation	60,227 01
From miscellaneous sources	42,443 25
Gross earnings from operation	$66,093,776 29

OPERATING EXPENSES.

Maintenance of ways and structures	$4,303,898 20
Maintenance of equipment	5,625,603 02
Maintenance of power plant	6,107,673 39
Operation of cars	15,830,593 89
General expense	6,145,293 99
Total operating expense	$37,013,062 49
Net earnings from operation	29,080,713 80
Income from other sources	2,757,281 60
Net income	$31,837,995 40

According to the printed report of the State Board of Railroad Commissioners for the year ending June 30, 1906, the total number of passengers carried by all the railroads of the State was 1,630,775,156, of which 105,757,957 were carried by the steam roads, and 1,535,017,181 by the street surface, elevated and underground railroads. Of this 1,535,017,181, upward of 80 per cent. or 1,249,829,568 were carried by the railroads now operating under the jurisdiction of this Commission. From the reports filed for the year ending June 30, 1907, it appears that the increase in passengers transported on these roads within the First District over the preceding year is 73,338,898, making a total of 1,323,273,368 passengers transported, a daily average of upward of 3,560,000 persons.

A very large proportion of this daily traffic — conservatively estimated at 60 per cent. or something more than 2,000,000 — travels within the limits of four hours, 7:30 to 9:30 in the morning, and 5:00 to 7:00 at night. At the time this Commission came into office, these corporations were thus carrying passengers to the number of 500,000 an hour — more than 10 per cent. of the entire population of the city — during some portions of the day, yet the service given was greatly below that required for a decent handling of the traffic offered.

Improvements in Present Rapid Transit Facilities.— The Commission has undertaken to deal with the problem in two ways:

(1) By the construction of rapid transit lines; (2) By directing the companies now operating within the district to increase their facilities. The first has just been discussed; the second will now be treated.

The Public Service Commissions Law imposes upon every common carrier the duty of providing safe and adequate facilities for the transportation of persons and commodities. Upon every such company, there falls in first instance the obligation to arrange schedules, routes and headways; to hire, train and superintendent employees; to pay them proper salaries and to arrange reasonable hours of labor; to construct, equip and maintain a suitable roadway, rolling stock, power stations, car barns, repair shops, depots, etc., in fact to do everything connected with the operation of the road and to do it in such a way that the service shall be safe, adequate, reasonable and proper. All charges for transportation must be just and reasonable, and no discrimination shall be made against any individual or individuals of a class.

It is not the function of the Public Service Commission to order any of these things to be done until the company has been found to be delinquent, and the power of the Commission begins when the company omits to fulfill its obligations. The procedure in any given instance, therefore, is of a two-fold nature. The default of the company must be established, and the steps which it should take must be decided upon. Then, if the company has been operating too few cars, or is not maintaining its equipment, or is charging too high rates, or in any other way is at fault, the Commission has the power, and is burdened with the duty, to direct what shall or shall not be done. But in every instance, the obligation to provide proper service, to charge proper rates, etc., is originally upon the private company.

Procedure.— The procedure of the Commission is so generally understood that it seems hardly necessary to state that no matter is finally decided, and an order issued, without a public hearing having first been held. Notice of the hearing is always given to the persons concerned, and adjournments are taken from time to time until all the evidence germane to the subject being considered is obtained. Where there is a formal complaint, the complainant appears, if he so desires, and the defendant company is given a

chance to reply. Almost invariably the Commission investigates the matter through its own employees independently of the two parties interested, so that it may have the evidence of experts who cannot be said to be partial or biased.

Where there is no complainant the procedure is very similar; for some department of the Commission's staff (a Transportation Bureau has been organized for this purpose) presents the results of its investigations. The persons or companies affected are given every opportunity to be heard, and the case is not closed until the evidence is all in. In order that the company may have some definite idea of what is wanted, a proposed form of order is generally prepared and submitted; but this is more to enable progress to be made more rapidly than as an expression of a predetermined conclusion. However, there have been instances where it was impossible to determine upon a tentative form of order, as required by statute, and in such cases a general inquiry has been held, out of which have grown orders for hearings and final orders.

There is still another class of hearings which are either held upon petition or initiated by the Commission itself. Ordinarily these are for the purpose of allowing organizations or individuals to present their views upon a subject under consideration. The Commission has always taken the position that ample opportunity to be heard should be given, and twelve public hearings of this general character were held during the six months just closing.

Summary for Six Months.—All told, 179 hearings were held between July 18 and December 31, 1907. As these were conducted, except in a few instances, when meetings of the Commission or of the Committee of the Whole were not being held, it is apparent that the collection of evidence has consumed a large portion of the time; and necessarily so, for before a wise and fair decision can be reached in any case, all the facts must be established and the companies affected must in all justice be given a full opportunity to present their views.

In section 3, infra, the results of 118 hearings have been set forth, except in those cases — some thirteen in number — which had not been completed at the end of the year. The improvements

in the service and equipment of the surface, elevated and subway roads in the five boroughs of the city are there given in detail.

As a result of these hearings the Commission has issued 186 orders. Of these 84 were complaint orders, i. e., orders transmitting a complaint with notice to satisfy or reply within ten days; 46 were orders for hearings; 42 were final orders; and 14 were general orders calling for information.

This Commission has held 104 meetings, although the act merely provided that the Commission shall hold a stated meeting at least once a month. In addition, there has been almost without exception, a meeting of the Committee of the Whole on every business day to discuss matters of importance relating to the work of the Commission. There has been also a large number of informal conferences between one or more of the Commissioners and representatives of companies or of committees of citizens. The detailed proceedings of the Commission are not set forth in this report. The record of each meeting is printed in full in the City Record and also in pamphlet form for binding in annual volumes.

Subway Improvements.— Pending the construction of new subway lines, the Commission decided that everything possible should be done to increase the carrying capacity of the present subway. Inspectors have constantly been at work to determine how many more trains could be run and when they were needed. But it was also decided that if any changes could reasonably be made in the subway itself and the equipment which would increase the number of passengers carried, the safety of operation and the means of ventilation, and decrease the discomfort of travel during rush hours, the Commission ought to be advised thereof so that it might direct such changes to be made. Mr. Bion J. Arnold, a railroad engineer of broad, practical experience in the construction and operation of railroads was retained.

The General Investigation of Transit Lines.— The investigation of the Interborough-Metropolitan Company, the Brooklyn Rapid Transit Company and their subsidiary and controlled companies, which was begun in August, had not been completed at the end of the year.

But upon the evidence taken at these hearings and subsequent observations, the Commission ordered changes in the service rendered in the subway and on the elevated roads of Manhattan that called for increase in facilities of between 20 and 25 per cent. Later it appeared that the service as rendered in obedience to this order was not sufficient, and other observations were taken which were made the basis of further orders.

So far as the surface lines of Manhattan are concerned, the Commission has required increases in service on Broadway, on Madison and Fourth avenues, and on Eighth avenue. In addition the Commission had a careful examination made of sixteen hundred cars belonging to the New York City Railway. Upon the results of this examination, a final order has been issued requiring that all cars be overhauled and put in condition, at the rate of ten cars a day after February 15, 1908. The financial condition of the New York City Railway Company, which resulted in the appointment of receivers by the Federal Court, has retarded to some extent the plans of the Commission for improvement of surface transportation in Manhattan, but the Commission has issued orders upon the receivers and expects them to be obeyed.

In the Bronx, numerous proceedings have been conducted resulting in final orders that have produced increase in service and additional conveniences in transfer and continuous rides.

In Brooklyn and Queens, sumstantial increases have been required on the more congested lines, as well as additional stairways and better station facilities. The congestion on the Brooklyn bridge has received constant attention. During the summer, a week's observations were made of the travel and since that time inspectors of the Commission have been kept continuously on the bridge. The bridge structure, including the Manhattan terminal is under the complete charge of the Bridge Department of the city and not of the operating company. The result, therefore, has been that this Commission has not found it possible to require or even recommend radical changes as to bridge operation. It has, however, been able to require that defective cars shall not be operated on the bridge. For example: Reports show that the cars of the Coney Island and Brooklyn Railroad Company, al-

though numbering one-sixth of the total of surface cars operating over the bridge, were producing over one-half of the break-downs. Orders have been issued, accordingly, requiring this company to overhaul its cars and place them in first-class condition. Switches and other details of track construction have been ordered repaired, and at the request of this Commission, the Bridge Department has forbidden the passage over the Brooklyn bridge, during the rush hours, of overloaded trucks. The endeavor has been so to require improvements that there shall be no delays or stoppage of traffic on the bridge. A delay of only one minute means for the aggregate of persons on the bridge at that time a total loss of days. The amount of travel is well shown by the statistics taken on October 17, 1907, showing that 426,364 persons crossed the bridge, requiring 15,263 elevated and surface cars to transport them, and that in the heaviest hour of travel 54,726 persons crossed the bridge in one direction.

Relative to transit in Richmond, hearings were given to citizens to express grievances which resulted in orders to show cause against the two electric railroad companies and the two steam railroads on the island. Final orders have already been issued upon these, after protracted hearings, requiring improvements in car and train schedules, station conveniences and safety devices satisfactory to the complainants.

A conservative estimate of the increases required of all the operating companies indicates that over 15,000,000 additional seats per annum have been added to the service in this city under orders of the Commission.

Accidents.— The Commission by appropriate orders has required transportation companies and gas and electric companies to report accidents. The total number reported by transportation companies for the six months was 24,209. The total number of deaths occurring in connection with such companies was 288.

This is appalling! The Commission believes that no more important work could be undertaken than the reduction of this death list; and a departmental committee, consisting of the Electrical Engineer, Chief of the Division of Transit Inspection and the Chief Clerk of Accidents, has been directed to make a thor-

ough investigation to ascertain whether it will be possible to adopt any method that will result in fewer persons being killed. Judicial processes in the nature of criminal prosecutions and civil suits for damages, partially because of the length of court calendars and the skill of counsel employed by the companies, have not been adequate; and regulative requirements by public officials are all the more necessary.

Gas Meter Testing.— Under the present law no corporation or person may put in use a meter which shall not have been inspected, proved and sealed by an inspector of the Commission. Upon complaint from a consumer as to the accuracy of the meter supplying his premises, the Commission tests the meter so complained of.

Previous to the creation of this Commission, the greater proportion of the meters bearing the stamp of the State Inspector had not been tested, a few sample meters having been selected for test and an entire consignment approved on the basis of these tests. The stamp affixed to the meter was so affixed as to interfere in no way with the opening and repairing of the meter, and the system of computing the percentage of inaccuracy was wrong. This system was at once abandoned, and a new system adopted which would insure the inspection, testing and sealing of every meter and the use of a seal which would not allow a meter to be opened without the destruction of the seal.

The Commission has in its employ a score of men testing upon an average over 1,000 meters a day. The men have greatly improved in efficiency and are now testing practically twice as many meters per day as in previous years. At the inception of the work a comparatively large number of new and repaired meters were found inaccurate and were rejected. As the work has progressed the companies have shown more care in the handling of meters and the number of inaccurate meters has correspondingly decreased. During the period from July 15 to December 31, 1907, the Commission tested in all 127,846 meters. Of this number 44,227, or 34.6 per cent., were new meters; 82,057, or 64.2 per cent., were repaired and removed meters, and 1,562, or 1.2 per cent. were complaint meters. Of the complaint meters 203, or 13.0 per cent. were found to be absolutely

correct; 211, or 13.5 per cent. were between absolute proof and 2 per cent. fast (the limit allowed by law); 598, or 38.3 per cent. were fast 2 per cent. or more (making, in all, 809, or 51.8 per cent. that were fast); and 550, or 35.3 per cent. were slow. The average per cent. of all fast meters was 3.43. The average percentage slow of all slow meters was 2.89.

Complaints Remedied.— Probably no portion of the work of the Commission has brought forth more emphasis and more general recommendation than its method of handling consumers' complaints against gas and electric companies relative to lack of proper illumination, wrong billing, removal of meters without notification to consumers when bills have been in dispute, excessive pressure or lack of pressure of gas, failure of companies to supply gas or electricity upon demand. The alleged inability to secure proper attention and relief from the companies has been apparently the chief source of irritation and has engendered the feeling in many instances that it is impossible to secure a reasonable settlement of a matter in dispute. Complaints by letter, by telephone and by personal application covering these questions have come to the Commission in large numbers. These cases being of an individual character, the Commission has found it unnecessary to hold formal hearings on the same, but has undertaken to adjust the dispute between the consumer and the company.

If, after securing a full statement of the matter in dispute between the consumer and the company, it is shown that the consumer has reasonable ground for his complaint, the company is requested to remedy the situation. In no case in which a complaint has been considered justifiable has a company refused to accede to the request of the Commission, and the result has been that numerous complaints of long standing between consumers and the companies have been settled by the Commission.

Rates and Practices of Gas Companies.— No investigation has been undertaken to inquire as to the reasonableness of rates or the methods and practices of the gas companies. The work of the Commission so far as it concerns such companies has been confined to the testing of meters as set forth above, the prosecution of complaints and orders requiring the filing of franchise docu-

ments, of forms of accounts and the filing of annual reports. In this connection the Commission desires to point out that for the first time all of the gas companies in New York city have filed their annual reports with a public commission.

As is well known, the Commission has been handicapped because of the litigation arising from certain injunctions obtained by certain companies in New York city in June, 1906, from Judge Lacombe, of the United States Circuit Court, against the Attorney-General of the State of New York, District-Attorney of New York county, city of New York, and the late Commission of Gas and Electricity, restraining them from acting under and by virtue of authority of chapters 736 and 737 of the Laws of 1905, fixing the price of gas at eighty cents, and chapter 125 of the Laws of 1906, creating the Commission of Gas and Electricity, and the order of the Gas Commission of February 23, 1906, fixing the price of gas at eighty cents and from in any way enforcing or attempting to enforce said acts or order, or any of the provisions thereof, against the complainant, and providing that the difference between the dollar and eighty-cent rate be deposited with the clerk of the court.

Under the provisions of the Public Service Commissions Law, this Commission succeeded to all the powers and duties, July 1, 1907, of the Commission of Gas and Electricity, and in October, 1907, the members of the Public Service Commission for the First District were substituted as defendants in place of the former Commissioners of Gas and Electricity. Leave to file supplementary exceptions was granted to the Commission, and when the case came on for final hearing on November 4, 1907, the Public Service Commission, by Mr. Abel E. Blackmar, its counsel, and Mr. Edward B. Whitney, its special counsel, took part in the argument and filed a brief praying a dismissal of the bill of complaint. The decision rendered by Judge Hough, District Judge, was in favor of the complainant. An appeal will be taken by the Commission to the Supreme Court of the United States and the case in favor of the consumers pushed with all vigor.

General Matters.— The Commission has required companies to report accidents, to file schedules of rates and charges, to file reports and to make answer to questions upon subjects relating to

their condition or operation. All companies have been required to file documents showing their franchise histories, and the compilation of the data as thus obtained is expected to be of the utmost value in determining the duties as well as the rights of the companies. Preparatory to the preparation of uniform forms of accounts, the companies have filed data showing the present method of keeping their accounts and so far as steam railroads are concerned the form of accounts has been prescribed by the Commission in conformity with the form of the Interstate Commerce Commission and the Public Service Commission for the Second District.

No applications have been received for the approval of additional issues of stock. Three applications have been considered for approval of bonds, but no determination was reached before the end of the year.

In view of the provisions of the act as to the holding of stock in other companies, the Commission deemed it necessary to require sworn statements as of July 1, 1907, showing the amount of stock in other companies held and tables are presented elsewhere showing the amount of control exercised by public service corporations over other public service corporations in this district.

No applications have been made for approval of the transfer of franchises. One application has been made and granted consenting to the operation of a franchise, that of the Nassau Electric Railroad Company on Livingston street, Brooklyn.

No proceedings for the imposition or collection of penalties or forfeitures or for the commencement of summary proceedings have been instituted or as yet found necessary.

II. RAPID TRANSIT.

A. GENERAL SITUATION.

This Commission on July 1, 1907, succeeded to the powers and duties of the Board of Rapid Transit Railroad Commissioners. The Rapid Transit Board was a State board originally composed of persons named in the act that created it. After January 1, 1906, vacancies were filled by the Mayor. Its annual reports, prepared to the close of each calendar year, were made to the Mayor. No report was made by the Rapid Transit Board for the first half of the year 1907, but in order that there may be no hiatus in the printed record of the rapid transit work in the city, there has been included as an appendix the report of George S. Rice, the then chief engineer, dated June 30, 1907, covering that period. The complete working organization with an engineering force of 326 men came under the jurisdiction of this Commission on July 1, 1907.

Following is the situation in which this Commission found the work. The Manhattan subway was operating between the Battery and the Bronx. The extension of this subway under the East river through Fulton street and Flatbush avenue to the Long Island railroad station, Brooklyn, was approaching completion, the excavation having been finished and construction work in various stages going on. The elevated extension of the northerly end of this subway in Broadway, the Bronx, was uncompleted and progressing slowly. Actual work was beginning on the Brooklyn subway loop, designed to connect the Brooklyn bridge, Manhattan bridge and Williamsburg bridge by a route through Centre street, Manhattan. The Brooklyn Fourth avenue subway had been laid out and determination made, both by the Rapid Transit Board and the Board of Estimate and Apportionment, that the contract for construction alone at city expense should be let, and a date in July for a public hearing on the form of contract had been fixed and advertised. A large number of subway routes had been laid out, the cost of which would be nearly, if not quite, half a billion dollars, but no proceedings were pending looking to actual construction of any of them. The foregoing statements cover the con-

dition of city-owned rapid transit work. In addition to these, private capital was being employed in the construction of the Pennsylvania tunnels under the Hudson river, Manhattan and the East river to Long Island City, and the McAdoo tunnels under the Hudson river and up Sixth avenue, Manhattan.

Manhattan Subway.— The original Manhattan subway has during the past year proved to possess all the importance that its advocates have claimed. Without it the transportation of passengers within Manhattan would have been paralyzed. Experience has shown that one of the main shortcomings of the subway is the delay caused at Ninety-sixth street, where the main line divides into the Lenox avenue line and the Broadway line. Extensive alterations are about to be made at this point which will, in the opinion of the operating company, increase the carrying capacity of the subway about thirty per cent. in hours of the greatest congestion. Another shortcoming is the slowness with which the cars can be emptied and filled at express stations, thus lessening the intended headway. The enormous use to which the express service is put shows that this is properly made the main feature of subway construction. The express service is already overcrowded and the main problem is to find how a still greater carrying capacity can be obtained pending the completion of other north and south lines in Manhattan. In order that the Commission might be carefully advised of all possible improvements in carrying capacity, it has retained the services of Bion J. Arnold, an engineer of wide experience in passenger transportation. Substantial results have followed recommendations based upon his reports, and it is expected that further improvements can be made. The subject of signals and safety devices is being carefully considered with a view to increasing the rapid succession of trains without lessening the safety. At present the cars do not afford space enough for exit and entry. It may become necessary to place side doors in the present cars. A greater door space must be provided in cars constructed hereafter.

Manhattan-Brooklyn Subway.— Contract No. 2 embraced that part of the Manhattan subway south of the City Hall extending to the Battery under the East river and through Fulton and Flatbush avenues to the Long Island railroad station. The portion

within Manhattan has been completed and operated for some time, but one delay after another has postponed the opening of the Brooklyn portion. It is now expected that before January 15, 1908, cars will run to the Borough Hall station and several months later to the terminus of the line. Although the tunnel under the East river has two tracks, this subway from Borough Hall to the Long Island railroad station has four tracks. Two complete tracks for a distance of about one mile lie unused and without any provision for connecting them with any route in Manhattan. When the Appellate Division of the Supreme Court disapproved of the use of William street south of Beekman street for subway purposes, it made use of these two extra tracks difficult. They will be made useful, however, in time in connection with an additional tunnel under the East river. Constant complaint, much of it well founded, has been made during the past six months by merchants on Fulton street and Flatbush avenue, because of the torn-up condition of these business streets. The condition of Flatbush avenue is still very bad. In July and August after constant effort Fulton street was placed in fair condition. Everything that constant supervision and enforcement of the contract could do on Flatbush avenue has been done by the Commission. In places there are seven separate underground tracks, and at the corner of Fulton street and Flatbush avenue it has been necessary to uphold two elevated railroads, the street surface and one subway, while a lower level subway was being constructed. No other subway work in Greater New York has been so difficult as that in this locality. When this Brooklyn extension is complete and in operation it is expected that the crowded condition of the Brooklyn bridge will at once be relieved, as many Brooklyn passengers, especially those taking the Manhattan subway north of the Brooklyn bridge will continue under the Battery tunnel to Brooklyn instead of crossing the Brooklyn bridge. This will be the first substantial alleviation of the Brooklyn bridge crush which, during the six mnoths last past, has reached the most intense point in its history. It should be remembered, however, that the growth of the city increases the pressure upon this bridge constantly. Each improvement seems to attract a new host of travellers, showing that a complete cure of the Brooklyn bridge crush will only come with a large increase of East river crossings.

Bridge Subway Loop.— The subway now in course of construction connecting in Manhattan the three East river bridges and commonly known as the Brooklyn subway loop, is the outcome of a long-continued and acrimonious contest as to the proper method of setting the Williamsburg bridge to work. The Williamsburg bridge, intended to relieve the Brooklyn bridge, was completed four years ago. It has four times the capacity of the Brooklyn bridge, yet on account of lack of connections in Brooklyn and inaccessibility in Manhattan, it has thus far been used only to a small part of its capacity. Whatever shortcomings may develop in this subway loop, it will at least serve as an approach to the Williamsburg and Manhattan bridges, bringing these otherwise remote bridges nearer to points in Manhattan where about seventy per cent. of the passengers desire to go. Its completion will mean a substantial relief to the Brooklyn bridge, for the new Brooklyn Fourth avenue subway will cross the Manhattan bridge and be introduced into Manhattan by way of this subway. It is expected that the work on the Manhattan side of the river will be completed well before the Manhattan bridge is ready for use.

The contracts for the loop were let by the Rapid Transit Board in June. When this commission decided to reduce the grades and enlarge the plans of the Fourth avenue subway, it was thought that the plans of the loop ought also to be revised, for the trains from the Fourth avenue subway would be run through the loop. If the Fourth avenue subway were enlarged, it would be advisable to enlarge the subway loop, otherwise the larger cars used by suburban roads could only run as far as the Manhattan terminal of the Manhattan bridge; for the subway loop allowed for a headroom of only 13 feet 6 inches above top of rail, whereas 14 feet 6 inches are necessary for the cars used in suburban traffic. It would also be impossible, if the headroom of 13 feet 6 inches were not enlarged, to allow for any railroad connection with future subways in Brooklyn and Queens, or for any of the present railroads in Queens to reach Manhattan via the Williamsburg bridge and subway loop.

Upon examination, it was also found that the plans for the loop provided for a double deck subway in part, and for the use of

grades frequently as high as 4 per cent., and in some instances as high as 5½ per cent. The steepness of these grades, and the frequency with which they were to follow one another in the loop, would not only greatly increase the cost of operation, but limit materially the number of trains that can be run through the subway in a given period, and increase the possibility of accidents.

The chief engineer to the Commission, Mr. Seaman, after careful study of the problem, found that it would be possible to modify the plans so as to increase the height of the tunnel, to reduce the grades, to decrease their number, and to do away with the double deck stations and tracks. To make these changes it will be necessary to change two of the stations, and in order to make proper connection with the crosstown line in Canal street, it is proposed to unite the two stations at Leonard-Franklin street and at Howard-Grand street, into one station at Canal street. It is also proposed to operate the loop as two double track railroads, instead of one four track road, but with cross-overs to be used in case of accident, or when needed for the shunting of trains. Eventually this might lead to the connection of the Williamsburg bridge with the Brooklyn bridge, which would naturally serve the purposes of the elevated roads in Brooklyn which connect with these two bridges. The other set of tracks would be operated in connection with the Manhattan bridge, through the proposed terminal at Chambers street, and thence down William or Nassau, crossing under the East river by a tunnel, and connecting with some future subway in Brooklyn.

This modification simplifies a very complicated plan; eliminates two double-deck stations, making all tracks on a level; fits in with a proposed future line across Canal street to the North river, connecting with all north-bound and south-bound routes which would intercept it, with the Fourth avenue subway and the Manhattan bridge; and increases very materially the safety of operation. It is estimated that the operating capacity would be increased fully 25 per cent., and also that the time of construction would be materially decreased.

At the close of the year, these plans were being perfected, and unless some unforeseen difficulty arises, they will be worked out in detail and substituted for the ones now under contract prepared by the Rapid Transit Board.

Transit Conditions Peculiar.— The two chief problems in passenger transportation that this city since consolidation has had to face are congestion along parallel north and south lines in Manhattan, and congestion due to lines of Long Island travel converging at East river crossings, especially the Brooklyn bridge.

The growth of Greater New York and its suburbs makes constant increase in north and south travel in Manhattan. The elevated roads began operation after the surface roads were over-taxed. Similarly, the subway began operation after the elevated railroads were over-taxed, and now the subway is itself over-taxed. There is no remedy other than additional rapid transit lines running the length of Manhattan. Reference to a map of the city will show that the present subway is half on the east side of the city and half on the west side, the two parts being connected by the east and west tracks through Forty-second street. A new subway traversing the entire easterly side of Manhattan is imperatively needed, with which connections can be made with several East river bridges. Recognizing the importance of such a route this Commission, during the past six months, has been giving careful attention to this subject, in order to be able to propose a route of the greatest possible efficiency and, in view of the city's finances, of the least possible cost. The result has been that at the close of the year this Commission formally initiated proceedings for an east side subway through Lexington avenue and south through the heart of lower Manhattan to the Battery — a plan more fully discussed further in this report. Similar steps have been taken regarding a new subway from the Manhattan bridge through Canal street to the Hudson river. Next in importance for Manhattan is a through west side line. It is also desirable that the Broadway-Lafayette avenue division of the Brooklyn loop system be progressed as rapidly as possible, and that the Manhattan division of the loop should be extended south of the Brooklyn bridge terminal.

The drawback to passenger transportation from the Long Island boroughs has always been the fact that traffic has converged to over-crowded foci where passengers disembarked at single points in the easterly edge of Manhattan, whence they were obliged to walk considerable distances to their places of business or pay

extra fare. The transit lines approaching lower Manhattan from Harlem and The Bronx, although congested, have at least landed their passengers for a single fare in the various business districts of lower Manhattan and almost at the doors of their factories or offices. The Long Island boroughs will always be inconvenient in this respect until their transit lines shall extend through Manhattan to the North river, or otherwise pierce the various business localities of lower Manhattan. More East river crossings will stop the extreme congestion that now exists at the Brooklyn bridge. The Battery tunnel, Manhattan bridge, Williamsburg bridge and future tunnels will accomplish this. But merely increasing the number of crossings is only half solving the problem. The transit lines crossing the East river bridges should not terminate as soon as Manhattan is reached at points that are sure to be congested, but should continue across Manhattan. Distribution and not concentration should be the aim. Every evil result of focal congestion at a single terminal is exhibited at present at the Brooklyn bridge. Nine separate elevated routes are fed over a single elevated track across the bridge and about twenty-five surface lines over the single track in the roadway. This limits the number of trains or cars that can operate on any one of these lines and affects transportation throughout the entire city.

An entirely different problem arises in the outlying and thinly settled parts of the city. There it is both the down town congestion through which suburban passengers must pass and the slow and inadequate transportation in the outer districts. As a rule the people living in the suburbs fail to recognize that the downtown congestion is quite as harmful to their localities as the lack of sufficient suburban transit lines. For the main cause of insufficient cars and trains in rush hours on the suburban lines is the limit imposed by downtown congested districts on the number of cars than can pass a given point. For instance, the trains that can proceed to six Brooklyn elevated lines must all go through Adams street. If the downtown congestion of the whole city could be relieved, many more cars and trains could operate in the suburbs. Consequently it is plain that the most pressing

problem that confronts the city is the relief of congestion in Manhattan, downtown Brooklyn, and at the East river.

Suburban Rapid Transit.—The lack of sufficient transit lines, and especially rapid transit lines, in many of the outlying districts is most serious. The suburbs of the city are constantly growing and extending. If there is not adequate transportation at a fairly rapid rate of speed from the circumference to the center of the city, natural growth is interfered with. As down town streets become more and more crowded, street car transit from the suburbs becomes so slow as almost to prohibit the growth of these localities that lack rapid transit. A clerk or workingman cannot afford to give much over two hours a day to going to and from his work. The expenditure of even two hours a day is economic waste, and is reflected in the loss of working ability on the part of the population. Some method of reaching the growing suburbs must be supplied other than by surface cars. Subways are very nearly ideal but their great expense makes them out of the question for many distant localities at present. As rapid transit roads increase, the tendency should be, and doubtless will be, to do away with the long street car rides from the suburbs to the center of the city, and instead employ the street car lines to carry passengers to the rapid transit lines, transferring them to rapidly moving subway or elevated trains. There is no reason why existing elevated railroads, which in the Boroughs of Queens, Brooklyn and the Bronx now terminate far short of the city line, should not be extended on some proper basis to meet this demand. Some of the elevated lines could have their carrying capacity greatly increased by adding one or two additional tracks. Even if the city builds subways as fast as it can afford to do, the elevated railroads will continue to be a necessity for a long time, and it does not seem right to cause a generation of people great inconvenience in transportation while waiting for the time to come when the subways may supersede the elevated railroads. We do not refer in this connection more to the elevated railroads in Manhattan and the Bronx than to those leading into the Boroughs of Brooklyn and Queens.

Steam Railroads.— These are an important factor in the city's progress, connecting as they do the city with the outside world,

but it is remarkable that their usefulness in relation to city travel is almost negligible. The trunk lines entering New York from the north carry almost no passengers from one point within the city to another. The same can be said of the Long Island Railroad in the Boroughs of Queens and Brooklyn. People will not pay a fare of fifteen or twenty cents when by some other method they can travel for five cents, and up to this time there has been no disposition on the part of any of the steam railroads to compete with the elevated and street railroads for the five-cent fare business. The Long Island Railroad Company a few years ago entered into an agreement with the Brooklyn Rapid Transit Company whereby each should keep out of the territory of the other. The result seems to have been that parts of Queens county are dependent on the Long Island Railroad which charges a high fare and seems to care little for urban traffic, yet prevents the street railroads from entering its territory. The steam railroads, like the New York Central and Long Island, have received valuable privileges from the city. They claim franchises to operate in city streets. The city, in the case of the Long Island Railroad, has paid part of the expense of constructing its Atlantic avenue tunnel and elevated. Extra tracks were permitted to the New York Central Railroad in Fourth avenue with a view to carrying urban traffic. Needed space within the city is taken up by these roads. They have no standing to say that they will carry no traffic that does not in itself pay, but they should recognize that they have a duty to use their lines as part of the rapid transit system of the city.

B. FOURTH AVENUE SUBWAY, BROOKLYN.

Situation July 1st.— On assuming office the Commission found appointments made by its predecessors as required by law for a final public hearing to take place July 25th on contracts for the construction of the Fourth avenue subway. The preliminary steps had all been duly taken by the Rapid Transit Commission and the approval of the Board of Estimate and Apportionment, including the setting aside by it of the sum of $23,000,000, had been given. Pursuant thereto the hearing as so arranged was

held on adjournment by the Public Service Commission on July 30th. The public interest was manifested by the presence of a large number of citizens, several representing important civic organizations and the engineer of the president of the Borough of Brooklyn appearing officially for him. The form and specifications of the contracts were discussed and opportunity was given all who desired to be heard.

This completed the requirements by which, in due legal form, the city, through its proper authorities, was committed to the project, leaving only the preparation, and the approval as to form by the Corporation Counsel, of the contracts with the successful bidders upon which actual operations might be begun.

While recognizing the obligation thus undertaken by the city, this Commission, after mature deliberation concluded that at this point there rested with it a responsibility of which it could not divest itself; namely, that its approval was involved and necessary in the final acts of letting and executing the contracts and overseeing the prosecution of the work. A sub-committee was thereupon appointed to examine carefully into the merits of the project. Much time was given to conference between and by its members with many citizens whose views were sought regarding it.

Route.— The subway was shown to extend from the westerly terminal of the Manhattan bridge (now being constructed and expected to be finished during the winter of 1909–10) across same to Fulton street, through Ashland place, across Atlantic to Fourth avenue and through this to Fortieth street, South Brooklyn, a distance of 3.84 miles. To that point the plans are for four tracks. There the subway divides into two branches, each with two tracks, though provision is made by which enlargement to four tracks is possible when required. One line continues down Fourth avenue to Fort Hamilton, a further distance of 3.13 miles. The other line proceeds through Fortieth street, New Utrecht avenue, Eighty-sixth street and Stillwell avenue to Coney Island at Surf avenue, a distance of 6.02 miles from the dividing point at Fortieth street and Fourth avenue. The whole line in Brooklyn, with its two branches, is but a fraction short of thirteen miles.

Section Traversed.— The trunk line passes through the thickly populated sections of the Third, Ninth, Tenth and Eleventh wards and beyond traverses the Eighth, Twentieth and Twenty-second wards, the line to Fort Hamilton reaching the Thirtieth, as does also the Coney Island branch to the south and east, which in addition extends to the Thirty-first ward. This territory embraces an area of twenty-six square miles in extent, with a present population estimated at more than 350,000 and capable of housing conveniently a million and a half of people, with a density of population of ninety-two to the acre, the average of the Twenty-third ward of Brooklyn, or even of about 2,500,000, with a density of population of one hundred and forty per acre, the ratio in the Twenty-second ward of Manhattan, neither of these being crowded districts.

The whole area lies within a radius of nine and three-quarter miles from the City Hall, about the distance of One Hundred and Eighty-first street in Manhattan to the north. It has a water frontage on the Narrows and ocean of about seven miles. It is well adapted to industrial and commercial development of unusual extent and of immense importance to the future progress of the city. Already promise and indication of this are to be found in the extensive docks, factories and warehouses constructed by private enterprise and in the immense piers of over 1,500 feet in length about to be built by the city, which will outrival all others. Further, the line will bring within the easy and economical reach of our vast population the seashore resorts and amusement places which constitute an important factor in the health of the city and its attractiveness to its thousands of visitors.

Advantages of Route.— The question of rapid transit in New York is large and involved. It may well include the considerations of:

(1) Relief for travel in the sections of congested population.

(2) Distribution of such congested population by means of facilities for access to other sections.

(3) The promotion of the city's growth by providing facilities for reaching the outlying and suburban districts.

(4) The financial advantages accruing to the city by the development of such sections resulting in increase of taxable values.

All of these, from the standpoint of the city at large, may fairly be said to be met in the determination of this route, and, withal, the exceedingly important local advantages of the diversion of travel from the overcrowded and overburdened Brooklyn bridge and its terminal in Manhattan, by way of the Manhattan bridge, to the business sections further uptown in the region of Canal street.

Besides these points no small weight was to be given to the fact that this route is to be the trunk of interborough traffic, so far as the Boroughs of Brooklyn, Manhattan and The Bronx are concerned, into all of which through travel is by it made possible, with easy transfers to all parts of the city by the several connecting or intersecting lines. Still further, it is a convenient route by which connection with the Borough of Richmond may be made, there being included as part of the plan for this route an extension by tunnel from Fort Hamilton, under the Narrows, to the opposite shore of Staten Island.

Construction Ordered.— These considerations, varying in the emphasis of importance of the several points in the minds of the Commissioners, in conjunction with the fact that the city authorities had already authorized it, entered into the final determination by the Commission favorable to the project of the Fourth avenue subway. Its approval was given at a public meeting on October 2d. While there was some divergence of views and votes the Commissioners were as one on the general proposition of the desirability of the route, their difference going mainly to the point of the relative importance of this subway and the time for its construction as compared with the requirements of other sections of the city. The Engineering Department was thereupon ordered to proceed with the revision and preparation of the contracts, following the record of the public hearing already given.

Enlargement of Original Plans.— In the meantime the Commission had determined on the appointment of Mr. Henry B. Seaman as chief engineer, to take effect on December 1st. In

view of the great and rapid changes which are almost continuously being brought about by invention and progress in methods, appliances and equipment for transportation, the Commission believed it to be a wise policy in the construction of this and other subways to make provision for possible enlargement and improvement to admit of meeting future demands. It, therefore, on November 19th adopted a recommendation by Mr. Seaman that the original plans for the subway should be changed from a height of 14 feet to a height of 15 feet from the base of rail, giving a clearance of 14 feet 6 inches, above the top of rail instead of 13 feet 6 inches, and a clear width at narrowest point of 13 feet to each track.

Elimination of Grades.— The original plans also involved a number of heavy grades, some of over five per cent. These adversely and greatly affect the facility and economy of railway operation. The Commission determined, therefore, to change these features so as to eliminate all grades of more than three per cent. except those leading to and from the bridges, which are unavoidable in the nature of the case. The plans and specifications embodying these important improvements, and some changes in the number and location of stations, are now nearing completion. At an early date the contracts for construction under them will be ready and offered for bids in sections. Promptly on the letting of them operations will be undertaken and pushed vigorously forward.

It is believed that the brief delay necessarily caused will not prolong the opening of this subway beyond the estimated time. The Commission is of the opinion that this subway, at least in one of the branches, will be ready for operation by the time of the opening of the Manhattan bridge and the connecting so-called loop in Manhattan. The latter is so related to the Fourth avenue subway that it may be regarded as a part of the same.

C. NEW SUBWAY ROUTES.

1. BROADWAY-LEXINGTON AVENUE ROUTE.

The urgent need for the immediate construction of other rapid transit subways needs no proof. Every person who uses the present lines knows they are congested, that the conditions of

over-crowding are indecent and that every improvement that can be made will hardly be sufficient to keep pace with the growth of traffic prior to the time when a new subway may be opened, to say nothing of relieving the congestion which now exists. The question is not whether a new subway is needed, therefore, but where a new line may be located most advantageously and which of the several routes that are needed should be constructed first.

During the past six months this question has been under constant discussion. Public hearings have been held at which the residents of every borough have been given an opportunity to appear before the Commission and state their views. Local organizations of citizens in different districts have been granted separate hearings, and suggestions from individuals have been freely made and carefully considered. The plans prepared by the Rapid Transit Board have been examined and the importance of the various routes laid out fully discussed.

The Route Described.— The Commission concluded toward the close of the year that none of these routes seemed to meet the present requirements so nearly as a new route called the Broadway-Lexington avenue subway, running from the Battery up Broadway or Greenwich and Vesey streets to the Post Office, thence up Broadway to Tenth street or thereabouts, thence under private property and public streets to Irving place, thence up Irving place and Lexington avenue to the Harlem river, thence under the Harlem river to 138th street or thereabouts. Dividing here into two branches, one line will go up Mott avenue to East 151st street, through 151st street and Gerard avenue to Jerome avenue and thence up Jerome avenue to Woodlawn cemetery; the other line will pass east through 138th street to the Southern boulevard; and up the Southern boulevard and Westchester avenue to Eastern boulevard.

From the Post Office, and possibly from the Battery, the subway will contain four tracks until it reaches 138th street. The easterly fork will contain at least three tracks and likewise the westerly fork as far as Jerome avenue, where there will be four tracks again. This is considered wise because at some future time a subway will probably be built in Eighth avenue to connect with the line up Jerome avenue, and then four tracks will be

needed to afford facilities to both lines. The whole line should be underground, except possibly the Southern boulevard and Westchester avenue section. Some money would be saved by building an elevated road on Jerome avenue instead of a subway, but in view of the many obvious objections to an elevated road, in view of the important character of this thoroughfare, and in view of the small saving in cost when the expense of constructing the whole line is considered, a subway throughout Jerome avenue would be preferable.

Possible Connections of Line.— The line thus planned could be connected with the New York Central railroad at Mott Haven Station, at 138th street and at 42d street, and suburban trains could be run through to the Battery via Broadway — a more direct route to downtown Manhattan than by the present subway. At this very moment, before the Grand Central Station has been reconstructed and while the traffic is being so seriously interfered with by this reconstruction that the number of persons using the Grand Central Station is very much less than it will be when the station has been rebuilt and the trains are again running upon schedule time, yet the present subway is congested by New York Central traffic. The proposed line would relieve this congestion and help handle the additional traffic that will come when the New York Central has completed its work of reconstruction and has electrified its lines.

The proposed line will also run close to the Steinway tunnel at 42d street and the Blackwell's island bridge at 59th street, so that a connection may be made with each. By either route the residents of Queens will be able to reach the lower portion of Manhattan much more expeditiously than at present.

The "Broadway-Lexington avenue line" is not a part of the "Tri-Borough route" as originally planned, but by means of the connection through Canal street, discussed later in this report, it has every advantage which the Manhattan portion of the "Tri-Borough route" possesses and certain other advantages which the other does not have, inasmuch as the Manhattan portion of the "Tri-Borough route" would not tap the Broadway section between the Post Office and Tenth street. It is also possible to make a similar connection with the Williamsburg bridge and any

subway extended by this route into Long Island. At the Battery it could likewise be connected with the present tunnel to Brooklyn or any future subway built east or west of Broadway.

Thus, while the proposed line is to be constructed in Manhattan and the Bronx, it will afford great relief to Brooklyn and Queens.

Other Advantages.— The value of the Broadway-Lexington avenue route both from the transit and from the financial standpoint is apparent. Below Fourteenth street it will run through the very heart of the commercial and office centers of the city. It will also tap the populous district between Forty-second street and the Harlem river, the residents of which at present can reach the lower Broadway district only by a circuitous route. The two branches in the Bronx will tap the sections which are most in need of transit facilities. The Jerome avenue line has been urged for years. The Southern boulevard section will run through a district already well populated and the Westchester avenue section will open up an area which has not developed owing to the lack of transit facilities. Further, the present subway carries the Bronxites by a very devious course from their homes to their offices. The Broadway-Lexington avenue route will shorten the trip very materially. Further, the directness of the line and the few curves (Lexington avenue is almost upon an exact line with Broadway) will safely allow cars to be run at high speed and will lower operating costs.

Inasmuch as more of the Bronx lies east than west of a line continued in a straight line upon the axis of Lexington avenue, the most natural connection of Jerome avenue would be with a future line down Eighth avenue, or a line between Eighth avenue and Lexington avenue, for it is probable that every subway built upon Lexington avenue or east of Lexington avenue, will be needed for the portion of the Bronx east of Jerome avenue. But if the Commission were to build the Jerome avenue line and to lease it to the company operating the Broadway-Lexington avenue line under such conditions that it might allow a separate company operating the Eighth avenue line to have running powers over the Jerome avenue section, the present connection of this section with Lexington avenue would not interfere with the ultimate normal development.

Attention should be called to the fact that the Broadway-Lexington line, as above outlined, is not precisely the same as the Lexington avenue route proposed by the Rapid Transit Commission. The Lexington avenue route, as originally planned, was not sufficiently direct and contained so many curves that the speed of the trains would be interfered with. It was also planned to connect the Lexington avenue line with the present subway at 42d street. This is considered objectionable for two reasons; the present subway has all the traffic it can possibly handle with decency, and perhaps more. To add to its burdens by feeding another line into it would be exceedingly unwise. Further, if such a connection were made, any competitor of the Interborough Company would be at a decided disadvantage when bidding for the operating lease. Upon the other hand, the subway as now proposed will not interfere with any longitudinal routes which may be built later. For example, a line connecting with the present subway at 42d street and Broadway could be brought downtown via Broadway to Union square, thence down University place, Wooster street and Church street to the Battery.

Finance.— The estimated cost of the Broadway-Lexington avenue line, including the two branches in the Bronx, would be about $60,000,000, and with the present traffic condition in mind, work ought to be begun immediately upon every section. However, if, for financial or other reasons, it should be found desirable to delay the awarding of the contracts on construction of certain portions of the route until another year, it would be possible at once to begin on the section from the Battery to the Grand Central Station. Within another year the contracts for the section from 42d street to 138th street could be let, to be followed by the Gerard and Jerome avenue section. By the time the portion from the Battery to 42d street would be ready for lease to an operating company, the other sections of the route would be under contract, so that even though they were not completed, the bidders for a franchise to operate would know when they were to be finished, and a lease could be made for the unfinished as well as the finished portions of the line. Further, if the construction of the entire line were approved by the Board of Estimate and Apportionment, it would be possible to advertise a

lease of this route at the same time the lease for the Fourth avenue subway is advertised. Thus, any prospective bidder could obtain not only a lease of the Fourth avenue subway in Brooklyn but also of the very remunerative line up Broadway and Lexington avenue. Owing to the possibility of a physical connection through Canal street, these two lines could be run as one system, making the proposition from a financial point of view very attractive and remunerative.

2. CANAL STREET EXTENSION.

The Commission also adopted a route for a two-track subway from the Manhattan bridge through Canal street to West street. According to the present plans for the Center street loop, no means have been provided for connecting any of the bridges with the present subway, the elevated roads, and new subway up Broadway or any future subways west of Broadway. Even the Fourth avenue subway from Brooklyn has been planned to run down Center street without any connection with any subway or elevated road in Manhattan. Such a condition is most inconvenient and inadvisable, particularly in view of the fact that by building a line across town under Canal street, any persons coming to Manhattan via the Manhattan bridge could change to the present subway, the proposed Broadway-Lexington avenue subway and each of the four subways to be built west of Broadway without climbing to the street and also to the elevated roads whose stations are immediately above. It is also possible to make a physical connection with the Broadway-Lexington avenue route and other subways, so that cars would be run through from the Bronx to Fort Hamilton or Coney Island via Manhattan bridge and the Fourth avenue subway. This plan does not interfere with a connection with the Center street loop, but merely provides for the running of certain trains from Brooklyn through to the North river and certain others down Center street to City Hall.

The estimated cost of this Canal street line is $7,000,000, but if it is not considered possible for financial reasons to construct the whole of it at once it could end for the present just west of Broadway. But it should be constructed at least to this point at

an early date, to provide for a connection with the present subway and the Broadway line.

These two routes having been adopted by the Commission, the matter was referred to the chief engineer and counsel, so that plans might be prepared for submission to the Board of Estimate and Apportionment. This was the situation at the close of the year.

D. THE RAPID TRANSIT LAW.

General Conditions.— The Rapid Transit Law is very generally misunderstood. It is commonly supposed that this Commission can grant franchises to street surface railroad companies. The fact is that the Rapid Transit Board had no jurisdiction over street surface railroad companies and could not grant them franchises. Its powers and duties were limited to rapid transit roads whether elevated, subway or surface. It is also commonly supposed that this Commission can grant franchises for the construction of rapid transit roads by private capital. The fact is that before Greater New York was created, it was determined by the referendum of 1894 that new rapid transit roads should be constructed and owned by the city of New York. That is now the law for the whole city. No city or State board can to-day grant a franchise to a private company for the construction and operation of an independent rapid transit road within Greater New York. This practically limits the construction of new rapid transit lines to what the city itself can afford.

Extensions of existing rapid transit lines, such as the elevated railroads and extensions of steam railroads, could be authorized by the Rapid Transit Board and can be authorized by this Commission. But the power to extend existing roads does not of itself enlist private capital for independent enterprises, and many of the more remote parts of the city are left without rapid transit because of this fact and because the money for rapid transit construction by the city is limited. Existing rapid transit lines are therefore freed by the existing state of the law from possibility of competition with any other rapid transit lines excepting such as the city itself may construct, and with the knowledge that for several years at least the state of the city's finances will

prevent any large amount of city construction, they feel under no pressure to extend their lines into fields now tributary to them. The question arises whether the Legislature should not provide some method whereby franchises for the construction of rapid transit lines with private capital, on terms fair to the city and yet attractive to the investor, may be granted.

The Constitutional Debt Limit.— The financial condition of New York city, so far as it is affected by the constitutional provision limiting municipal indebtedness, needs careful consideration. Under section 10 of article VIII of the State Constitution, no county or city may incur debt to exceed ten per cent. of the assessed valuation of the real estate as assessed for the purposes of taxation, except that water bonds may be issued even though they do exceed the ten per cent. limit, and except, further, that all debt incurred by the city of New York after January 1, 1904, for water works, shall not be subject to the ten per cent. limitation. In other words, all water bonds for the city of New York, issued since January 1, 1904, shall not be counted at all in computing the constitutional limitation, but all water bonds issued prior to that date must be counted, and if the total debt, including such water bonds, shall amount to or exceed ten per cent. of the assessed valuation, no further indebtedness, except for water, may be incurred until ten per cent. of the assessed valuation shall exceed the net debt. According to the statements of city officials, the present municipal debt of New York city is so near the limit provided by the Constitution that it is impossible to carry out the public improvements which are imperatively needed.

The conditions under which people are transported in New York city are indecent, and the present facilities are wholly inadequate. In many sections the street traffic is so congested that it is impossible to increase the facilities provided by the surface lines to any great extent. The present subway is crowded to the limit and the improvements that are now under way will hardly be sufficient to relieve the present congestion to say nothing of handling the natural growth of population along its lines. The one direction in which relief may be secured is through the construction of rapid transit subways, but the city is so near the constitutional debt limit that no great relief can be afforded by

municipally owned subways, unless some amendment is made to the Constitution. Under the present constitutional limitation, the city is handicapped in the purchase of revenue-producing property and every addition of this sort reduces the amount of debt that may be incurred not only for revenue-producing undertakings but for other purposes, such as schools, libraries, baths, parks and playgrounds. Such a condition is bad, for the development of the city in these directions ought not to be retarded by the acquisition of a piece of property which may make a profit for the benefit of the taxpayers. For illustration, take the fifty million dollars in bonds issued by New York city for the construction of the present subway. The operating company has agreed to pay the city the interest and sinking fund charges upon the entire amount issued. So long as it does so, this debt is not a burden upon the taxpayers. Indeed, the expenditure of this amount of money has greatly benefited a portion of the taxpayers by increasing the value of the property along the greater portion of the route.

Change in Powers of the Rapid Transit Board.—A rapid transit railroad may not, under the Constitution of the State of New York, be built in a city street except with the consent of the local authorities and a majority of the abutting property owners or, if the latter cannot be obtained, then of the Appellate Division of the Supreme Court. The Board of Rapid Transit Railroad Commissioners, under the act of 1891, always held the power to adopt routes and general plans for rapid transit railways and to obtain, if possible, the necessary consents, and many such have been adopted and the consents procured, but the board's powers and duties, after such adoption and consents, varied after 1891 from time to time, and as they have come to this Commission are now found to be limited in fundamental ways by two acts of the Legislature, viz.: by the act of 1894 for the construction of the roads at public expense, introducing the city's debt limit as a necessary consideration before a contract can be let, and by the act of 1906, which limits the grant of any contract for construction, maintenance and operation of a road to the terms of twenty years with a renewal of twenty years. In its original form the act of 1891 provided that the Commissioners should establish routes

for rapid transit railroads, procure the necessary consents and then offer the franchise for sale at public auction, the road to be constructed by private capital, and held for a definite term, with a provision for resale at its expiration. Power was also given to grant additional franchises to existing railroad corporations. A route was adopted, consented to and offered for sale under the original act of 1891, but there was no bidder whose offer could be considered.

Municipal Construction Decided Upon.— The Commissioners had, however, gathered much valuable information, and the suggestion was made that if in some way the city's credit and its ability to borrow at low rates could be utilized in obtaining the large sum necessary for the construction of the road, a railroad might be built and the city secured and reimbursed for its advances. The act of 1894, chapter 752, provided for submitting to popular vote the question whether rapid transit roads should be constructed by the city at public expense, under contracts for construction and operation with the same party for a term of not less than thirty-five years or more than fifty years, with provisions for renewal as might seem just to the Commissioners; and that if such approval be given, then the road should be so built, otherwise, that it should be offered for sale and be constructed by the purchaser, if any could be found, at his private expense, in the same manner as the act had previously provided.

The popular vote or referendum approved the construction at public expense, as provided by the act, under the charge of the Board of Rapid Transit Railroad Commissioners. The sale of franchises and construction by private funds was thereby in effect stricken out of the law, and the principle of construction of all rapid transit roads thereafter at public expense established.

After consolidation of the municipalities which, under the Greater New York Charter, became the city of New York on January 1, 1898, the same principle of construction at public expense, upon routes and plans adopted by the board, was extended to the entire new city (Laws of 1900, chapter 616). Since that time it has not been in the power of the Board of Rapid Transit Railroad Commissioners,— and it is not now in the

power of the Public Service Commission for the First District,—to offer any such franchise of rapid transit roads for sale or to have subways built as private ventures or in any other manner than at the public expense, based upon an issue of bonds of the city subject to the constitutional limit of indebtedness. Soon after this Commission took office a letter was received from the City Comptroller to the effect that the construction of new rapid transit roads other than those already approved for contract by the Board of Estimate and Apportionment could not be considered for some time because of the financial condition of the city.

The powers, however, of the late Board of Rapid Transit Railroad Commissioners to make contracts for construction at public expense and operation of rapid transit railways resulted in the contracts for the Manhattan-Bronx subway (1900) to continue for fifty years with a renewal of twenty-five years, and the Brooklyn-Manhattan subway (1902) to continue for thirty-five years with a renewal of twenty-five years. At the time these contracts were made the act required, after the routes had been adopted and consents procured, that the contract before execution should be approved as to form by the Corporation Counsel, the appropriation being limited by law to fifty-five millions of dollars, after which the powers and control of the city authorities ceased, and the Rapid Transit Commission had entire control and supervision of the construction and operation of the road. In 1904, however, it was provided that no contract could be made unless and until the Board of Estimate and Apportionment of the city should have consented and prescribed a limit to the appropriation of bonds for the same.

Extensions of Existing Lines.—An exception to this principle of construction at the public expense existed, however, as to franchises for the building of railroads which were extensions, connections or additions of existing railroads. Under this provision of the act as amended from time to time since 1891, franchises for the construction at private expense of the tunnels known as the "Pennsylvania Tunnel," from New Jersey to Long Island, and the "McAdoo Tunnels," from New Jersey to Manhattan, were granted by the late board. As to these franchises, the act provided that they could be granted by the Board of Rapid

Transit Railroad Commissioners upon such terms and conditions and for such rental, prescribed by the board for a period of not more than twenty-five years and subject to readjustment at intervals each of not more than twenty-five years, as the board should determine, subject only to the constitutional consents required as to any street upon, above or under which the railroad was proposed to be constructed.

The Elsberg Law.— These continued to be substantially the powers of the Rapid Transit Board until the passage in 1906 of the act referred to as further limiting the powers of the board. The effect of this act, commonly called the Elsberg Law, was to provide that the Board of Estimate and Apportionment might, after a route had been adopted by the Rapid Transit Commissioners and consented to, decide whether a contract should be made for construction, equipment and operation of the road, or separately for construction in whole or in specified parts, or for equipment, or, either then or later for operation, and whether these contracts should be made with one or several persons at the same or different times, and that after it had been so decided, the Rapid Transit Board should make such contracts with the consent of the Board of Estimate and Apportionment; and that the contract for construction, maintenance and operation of a road should be made for not exceeding twenty years, with provision for renewals of not more than twenty years; and that if, after construction and equipment at the public expense, a separate contract for operation be made, it should be for a term not exceeding ten years, with provision for renewal not exceeding ten years.

In case the contract is let for construction, equipment and operation the contractor must give a bond that during the term of operation he will pay a rental to the city sufficient to pay the interest on the bonds issued by the city for construction, and approximately one per cent. per annum into a sinking fund to pay for the gradual extinction of the original cost. If the contract is for operation alone, the operating contractor must pay the interest on both the cost of the road and the equipment thereof, and in addition approximately one per cent. into a sinking fund.

But if the city constructs, equips and operates it is provided that the rates of fare shall always be adjusted with a view to securing sufficient receipts to pay interest on the total cost of construction and equipment and one per cent. into a sinking fund without recourse to taxation.

As to franchises for extensions and connections of existing railroads to be built as private ventures, the act of 1906 also provided that they should be granted with the approval only of the Board of Estimate and Apportionment, and as to trunk line tunnels and trunk line connecting roads in perpetuity, the compensation should be prescribed by the board for not more than twenty-five years, and readjusted thereafter at intervals each of not more than twenty-five years, and as to extra tracks, additional facilities, extensions and connections for railways wholly or in part within the city, that the grant should be to one owning, leasing, constructing or actually operating a railroad in the city, and should not be longer than twenty-five years with a twenty year renewal; that in no event should the grant be for a longer time than the original franchise of the road to which the grant was an extension or addition; that at the end of the term the rights of the holder in streets, etc., should cease without compensation, and the plant, except rolling stock and other movable equipment, vest in the city without compensation and that the compensation for the franchise should be prescribed for not more than twenty-five years and thereafter be readjusted at intervals of not more than ten years until the end of the term.

Under this last section it would be practicable, if approved by the Board of Estimate and Apportionment, to grant extensions to be built at private expense of the subways constructed or now in process of construction, but the term of such extension could not exceed, with renewals, forty-five years, whereas, the contracts for the present subways define them as continuing, with their renewals for seventy-five and sixty years, respectively.

Duration of Franchises.— It would seem that if franchises to bring by tunnel under the North River and East River the trunk lines and electric roads of other states to terminals in the center of the borough of Manhattan, are so valuable as to tempt the

investment of private funds in the construction thereof, authority to offer for sale franchises for rapid transit subways in the city of New York, to be built as private ventures and on terms equally or more favorable to the city ought to be given as one way of realizing the needed addition to the city's transit system. Moreover, as it has been deemed wise by the Legislature to allow separate advertising and letting of contracts for construction at the expense of the city, for equipment, and for operation, it would seem right to make lawful a longer term than the twenty years now prescribed by law, in order to invite competition. A hard and fast limit especially if so short a period as twenty years will render some propositions unattractive, restrict bidders on all propositions however good, and allow no leeway to this Commission and the Board of Estimate and Apportionment to take advantage of the different degrees of desirability of various routes. It should be made possible for the letting authorities to obtain information on all the elements making up the cost and value of a venture of this kind and, by balancing a valuable term of operation against the cost of construction, secure a road built without much, or, perhaps, any expense to the city.

The City's Needs.— This city is in great need of more rapid transit railroads. Slow moving surface cars cannot take their place. Yet, under the existing law private capital cannot be used for their construction, and the ten per cent. debt limit imposed upon the city by the State Constitution renders sufficient municipal construction an impossibility. If the Constitution should be amended so that money borrowed for self-supporting utilities would also be exempt from the debt limit, the borrowing capacity of the city would be increased so that additional subways could be built by the city. Even if this course should commend itself to the Legislature, the amendment could not be submitted to popular vote until the fall of 1909. A determination on the part of the Legislature to amend the Constitution will not cause an increase of municipal construction for three or four years, and the growth of the city is such that it should be made possible to enlist private capital for rapid transit construction in the meantime. There is no good reason why the city of

New York should be cut off from the exercise of both methods of building rapid transit roads. The granting of franchises is now hedged about with provisions that make it certain that fair terms both as to time and compensation will be imposed. The financial success of the subway now in operation has removed the doubts that existed fifteen years ago. Private capital would probably not be afraid of subway investments.

In conclusion we make the following recommendations:

A constitutional amendment exempting from the ten per cent. debt limit bonds for the construction of rapid transit lines, when, so far and so long as such rapid transit lines shall be self-supporting.

An amendment to the Rapid Transit Law providing that leases of extensions of rapid transit lines may be made to terminate at the same time as the original lease, this Commission having the power, in conjunction with the Board of Estimate and Apportionment, to fix the terms, conditions and compensation, and to readjust the same each twenty or twenty-five years thereafter.

An amendment to the Rapid Transit Law which shall give the local authorities and this Commission the power to allow the construction and operation of rapid transit lines by private companies upon payment of part of the earnings to the city or other proper terms, and with a reservation to the city of the privilege to purchase at any time after a certain period, not more than twenty or twenty-five years, and without any payment for the franchise itself.

An amendment to the Rapid Transit Law making it possible for the local authorities and this Commission to let contracts for operation for a longer period than twenty years, or else to make the lease terminable at any time after a certain period, not more than twenty years, with a provision that the equipment shall be purchased at a fair price by the city on the termination of the lease.

E. WEST SIDE TRACKS, ELEVENTH AVENUE.

The New York Central tracks on the surface of the west side of the borough of Manhattan should be removed. In 1846 the

Legislature granted a charter to the Hudson River Railroad Company with power to construct a railroad on any of the streets or avenues of the city of New York west of Eighth avenue and on or westerly of Hudson street. This was followed by ordinances of the city of New York granting to the railroad company permission to construct a double track of rails with suitable turnouts along the line of the Hudson river from Spuyten Duyvil creek south through certain streets to Chambers street, and subsequently to Broadway at Warren street.*

The Saxe Law.— This subject has been a pressing one before the Commission because the so-called Saxe law (Laws of 1906, chapter 109) imposed upon the Board of Rapid Transit Railroad Commissioners the duty of endeavoring to make an agreement with the railroad company to do away with operation at grade and to construct a subway south of 59th street, and in case such an agreement should not be entered into before the expiration of one year from the passage of the act then the Board of Rapid Transit Railroad Commissioners was directed to condemn all the rights, privileges and franchises of the railroad company across, through or along the streets, public parks or places. The year specified in the law expired before any contract was made, the date of expiration being March 26, 1907.

It therefore became necessary for this Commission, following the plain direction of the law, to begin condemnation proceedings. The Commission early started a careful and exhaustive research to ascertain and compile the laws, franchises and permits which have been passed or issued. Surveys were made to determine

* The first ordinance, dated May 6, 1847, authorized the construction of the railroad from Spuyten Duyvil creek as far south as Canal street. The road was extended through Canal and Hudson streets down to Chambers street under authority of an ordinance dated September 25, 1849. Chapter 216 of the Laws of 1846 and the ordinances of May 6, 1847 and September 25, 1849, constitute the authority for the main stem of the road as it exists to-day. By an ordinance dated December 20, 1864, the railroad was authorized to extend its tracks from Chambers street, through College Place and Warren street, to Broadway, "for the use of their city cars." Subsequently, by additional ordinances, authority was granted to construct various tracks, spurs, switches, sidings and turnouts to be operated in connection with the main stem of the railroad. To-day the company has no tracks south of its freight depot at Beach and Hudson streets.

what tracks were laid in conformity therewith, what tracks, if any, were laid without sanction of law, and what rights existed that were not used. All of these facts have been brought together in reports and maps. Condemnation maps have been prepared and duly transmitted to the corporation counsel of the city of New York, as he is the person designated by law to take charge of condemnation proceedings initiated by this Commission. All subsequent steps, therefore, are to be taken by the corporation counsel. It should be added that a provision in the Saxe law allows this Commission to discontinue the condemnation proceedings at any time before the confirmation of the final report of the condemnation commissioners.

It was discovered that some of the tracks, especially spurs leading into private grounds for business purposes, were laid under many revocable permits granted by the city of New York. These were collated and a list thereof transmitted to the Board of Estimate and Apportionment and to the corporation counsel with a suggestion that they should be revoked at a suitable time so that there would be no danger that the condemnation commissioners would place a valuation upon them.*

*Permit.	GRANTEE.	Date of permit.
No. 1	Hudson River Railroad Co	December 17, 1874
No. 2	New York Central and Hudson River Railroad Co	December 27, 1897
No. 3	New York Central and Hudson River Railroad Co	November 4, 1897
No. 4	Kilpatrick & Roylance	June 22, 1896
No. 5	John Glass	December 21, 1893
No. 6	John Glass	July 9, 1888
No. 7	Gansevoort Freezing and Cold Storage Co	April 10, 1888
No. 8	Adams & Co	November 3, 1899
No. 9	Genesee Fruit Co	March 19, 1891
No. 10	Sanderson & Co	June 6, 1899
No. 11	Atlantic Transport Co	December 27, 1899
No. 12	Booth & Edgar	April 11, 1878
No. 13	New York Central and Hudson River Railroad Co	December 4, 1874
No. 14	New York Central and Hudson River Railroad Co	October 31, 1890
No. 15	New York Central and Hudson River Railroad Co	December 31, 1890
No. 16	John M. Mueller	April 28, 1872
No. 17	A. M. Allerton, Jr., & Co	January 5, 1859
No. 18	H. M. Kuhnast	January 30, 1897
No. 19	American Express Co	May 21, 1856

Methods of Relief — Eleventh Avenue.— From the foregoing it will be seen that the mandatory provisions of the law

have been complied with. But some method of sinking or elevating these tracks must be found. For many years the situation has been growing worse and worse. Children are killed, needed streets are rendered almost impassable, traffic is constantly impeded by freight trains, and a large portion of an important section of the city finds its progress retarded. The probable award on condemnation would impose a serious burden of payment upon the city, and moreover some railroad access to the westerly part of the city to bring into market produce, meat, milk and merchandise, is desirable. The solution, therefore, rests rather in the replacement of the tracks than in their entire removal.

An elevated freight railroad through Eleventh avenue is undesirable. All of the objections that are made against a passenger elevated road apply to a freight elevated railroad, and on account of switches for sidings, a freight elevated would be even more objectionable. The alternative, as far as Eleventh avenue is concerned, is a subway for freight purposes. When, however, it is considered that it is very difficult to introduce sidings from the street surface into a freight subway, that it is very expensive to enlarge it for future needs, and if constructed at the expense of any private company, the company would demand some very valuable concession in return, a conclusion in favor of a freight subway through Eleventh avenue is open to serious objections. The New York Central Railroad Company has been willing to build at its own expense a freight subway from Fifty-ninth street to Thirtieth street, but only on the condition that it should have a franchise for four extra freight tracks from Spuyten Duyvil creek to Thirtieth street and the perpetual and exclusive ownership of these rights. The city itself would hardly want to build a *freight* subway through Eleventh avenue, because not only would the cost be great, but as it would be distant from the water front it would only be used by the New York Central Railroad.

Water Front Transportation.— If it should seem unwise to place a freight line either below or over Eleventh avenue, the alternative would be the North River water front. The city now owns the so-called marginal way practically all of the dis-

tance so that it would not be necessary to construct the elevated road on West street, but the entire structure could be between West street and the piers. It would seem proper that the elimination of the west side surface tracks of the New York Central Railroad should have some relation to the piers. We are inclined to concede that the present pier uses are such that there is no great demand for freight car connections. These docks are more and more used for passenger and package freight. Freight intended for the interior can be cheaply lightered to railroads. Nevertheless, there is no doubt that an elevated freight road along the river front would sometime be of advantage to shippers. Such a road could be connected with the piers by spurs, and also with every freight-yard, depot, and factory on the west side.

A subway along the west side would be useful mainly for freight purposes because necessary switches and cross-overs would make it difficult to operate fast passenger trains on the same grade. If a passenger level were placed under the freight level, there would be difficulties due to depth and the presence of the freight line between the passenger stations and the surface. On the other hand an elevated structure along the water front might be so built as to provide for passenger trains, and later an upper level might be added. The saving in cost of an elevated structure over a subway of equal capacity would be very great. Nor can it be said that the appearance of the water front would be greatly injured. Artistic and heavy construction could be employed.

The part of the west side surface tracks that now cause the most trouble and danger is on Eleventh avenue between Fifty-ninth street and Thirtieth street. The company has large yards at each of these points. The first construction work should be either the lowering of the tracks into a subway on Eleventh avenue or removing them to an elevated structure between these points along the piers. The number of cars that proceed south of Thirtieth street is comparatively small.

Franchise Terms.— If the state of the city's finances would allow it, it would probably be wise for the city to build and own

an elevated freight railroad along the Hudson river piers. This could be made accessible not only to the New York Central railroad but to the Pennsylvania by an incline from its tunnel, and to all the other railroads by floats. Its earning ability would constantly increase and in time it would become a valuable asset to the city. While, however, the need for passenger rapid transit lines is as pressing as at present, there is little hope of the city erecting a municipal water front road for freight. The best available plan would seem to be to let some company build it at its own expense,— the New York Central if it would undertake the work on more favorable terms than anyone else. An arrangement might be made analogous to that made by the authorities for the continuation of the McAdoo tunnel route through Sixth avenue to Thirty-third street, which was substantially that the city could buy at its then value at any time after twenty-five years and in the meantime a fair consideration was made payable to the city for the franchise privileges.

Progress Made.— This Commission has since its beginning been working constantly upon this difficult problem of the west side tracks. It has brought together all available information. Its committee has by conferences and hearings endeavored to learn the views of the many organizations interested in the port, the city at large, and the immediate locality. It should, however, be frankly admitted that the Commission has not yet been able to arrive at any conclusion entirely satisfactory or that can be confidently affirmed to be the best. Inasmuch as the Saxe law did not authorize this Commission to do anything further than to begin the condemnation of the franchises, which it has done, and further legislation will probably be needed to procure a new method of freight transportation for the west side, it might perhaps be considered that the Commission could properly await further directions from the Legislature. But as the problem involves so many questions that are properly cognizable by this Commission, and as so many complaints against the present operation are being received at its offices, and as the correct solution is so closely linked with the rapid transit problem, there will be no cessation of its work upon this question.

Line North of Seventy-second Street.— The treatment of the New York Central railroad tracks north of Seventy-second street should be largely from the landscape point of view. To-day they are a disfigurement to the most beautiful water front that New York city possesses, lying as they do between the park system and the Hudson river. Riverside park should be extended in places over the track which would run in an open arcade. Parts of the roof might contain green sward or shrubbery and would thus be a valuable extension of the park area. It would be necessary to cross Dyckman street and the valley at One Hundred and Twenty-ninth street by elevating the grade of the railroad tracks. The roofing of the tracks at intervals would render accessible the strip on the edge of the river now owned by the city, and which could readily be filled in for a play ground. The New York Central Railroad Company desires to obtain room for from two to four additional tracks. These, if allowed, should be between the present tracks and the river. Some fair arrangement should be made between the city and the railroad company so that the railroad company should pay for all or part of the covered arcade as a consideration for the granting of extra trackage rights or space.

In general this plan contemplates the utmost utilization for commercial purposes of such trackages as may be allowed south of Seventy-second street and the beautification of the trackage area north of Seventy-second street. Neither of these purposes is accomplished now. When the unsightliness, danger, and inconvenience of the west side tracks are abolished a vast area of the city now retarded in its progress will be given an opportunity to attain the position of importance that its location deserves.

F. SUBWAY LITIGATION.

Park Avenue Case.— Among the matters taken over from the Rapid Transit Board was the litigation growing out of the construction of the present Manhattan-Bronx subway in Park avenue. The routes and general plan of this subway, as approved by the municipal authorities and consented to by the Appellate Division of the Supreme Court in the First Department in lieu of the consent of the property owners, provided for two tunnels under Park

avenue, the easterly tunnel being about thirty-five feet from the easterly side of Park avenue. In order to provide for a possible future connection to be made with the New York Central system at Park avenue and Forty-second street, the engineers of the former Rapid Transit Board, without any action on the part of the board or other authorities, shifted the easterly tunnel to within eight and one-half feet of the street line in certain places. This change was acquiesced in by the contractor, and the work went on until March, 1902, when the change was brought to light through cave-in, resulting in the destruction of several houses and substantial injury to others.

At this time the excavation of the easterly tunnel section was about 75 per cent. completed, and approximately $415,000 had been expended thereon. The Rapid Transit Board was then faced with the question whether to fill in the excavation and begin all over again, in accordance with original plans, thereby losing the large amount expended, delaying the final completion of the subway at least a year and losing the benefit of an admittedly superior plan, or to approve the unauthorized change and complete the work as it stood. The Board chose the latter course and on June 25, 1902, formally approved the change and directed the completion of the work in accordance therewith.

An investigation was made by the abutting property owners, and two of them, Charles T. Barney and Arabella D. Huntington, instituted actions in both the State and Federal courts, asking for an injunction against the further prosecution of the work and for damages. The actions in the State courts were litigated by them through the Appellate Division, but did not go to the Court of Appeals. The injunction was refused, largely on the ground that although in the opinion of the courts the deviation was unlawful, still an injunction would not issue to enjoin a completion of the easterly tunnel section because of the great public interest at stake, and the property owners were left to the remedy of damages at law. The actions instituted in the Federal courts were finally carried to the Supreme Court of the United States, where they were finally dismissed on jurisdictional points.

The Rapid Transit Board in these litigations had maintained that such deviation was not unlawful, that the right to order it

was within the province of the Board, but in view of the opinion of the courts to the contrary, the Board on April 16, 1903, adopted resolutions laying out a new rapid transit route to coincide with the route as changed, which was approved by the municipal authorities. The property owners refusing their consent, application was made to the Appellate Division for its consent in lieu thereof. The Appellate Division appointed three commissioners who held extended hearings and reported in favor of the construction of the amended route, but expressed in their report, the opinion that some provision should be made for the compensation of the injured property owners. This met with the approval of the court, which decided, Presiding Justice Van Brunt dissenting, that the payment of damages must be a condition precedent to the confirmation of the report of the commissioners and the giving of its consent and on December 7, 1905, referred the question of damages to Mr. Alton B. Parker, who on October 31, 1906, filed his report, awarding damages to the amount of $199,630.18 with interest. This report was thereafter confirmed by an order of the Appellate Division, entered on March 2, 1907.

For some time prior to the time of the confirmation of Judge Parkers's report, negotiations for an adjustment of this matter had been pending. On the approval of this report, the matter was again taken up and a tentative agreement reached with the contractor, by which the city and the contractor were to share the amount of damages. On the presentation of this proposed adjustment to the corporation counsel, his approval was refused, largely on the ground that the Rapid Transit Board was a State and not a city board and that the city was not bound by any proceedings conducted by the board without notice to it and that the city was therefore under no obligation to recognize this award.

The Rapid Transit Board then directed its counsel to make a motion in the Appellate Division to bring in the city and the contractor and those connected with him as parties to the proceeding, which motion was granted after argument, and the city given the right either to move to reopen the references before Judge Parker or to file exceptions to it. The city adopted the latter course and exceptions were duly filed.

The property owners have since renewed their motion to deny the motion to confirm the report of the commissioners, which if granted, would make the route invalid, but this motion has been adjourned from time to time and is now set for January 10, 1908, and in the meantime negotiations are again pending for the adjustment of this matter by the payment of the awards to the property owners.

Arbitration on Contracts.— It is provided by the contracts for the Manhattan-Bronx subway that the contractor shall obey and follow every direction given by the engineer, and that the decision of the engineer shall be binding upon the contractor and the city so far as that the contractor shall proceed or refrain from proceeding and without any delay obey the requirement of the engineer; but the determination of the engineer shall not be conclusive upon either the contractor or the city as to the reasonable value of any work or materials additionally required or omitted, or as to the question whether the contractor is entitled to additional payment for anything additionally required by the engineer, or as to the question whether the city is entitled to deduction from the amount payable to the contractor according to the terms of the contract. In any such case the engineer is to make his determination in writing and in duplicate, one to be filed with the Rapid Transit Board (now this Commission) and one delivered to the contractor. This determination is binding and conclusive upon the city unless the Commission shall appeal within ten days and upon the contractor unless he shall appeal within ten days. In the notice of appeal an arbitrator must be named on the part of the appellant, and if the party against whom an appeal is taken shall appoint an arbitrator, the Commission and the contractor shall select a disinterested person to act as third arbitrator. He shall be chairman of the board of arbitration.

Under this clause of the contract the engineer of the Commission, on November 30, 1907, made his determination that the balance due upon the contract and upon extra work, after deduction on account of omissions, was, subject to certification, November 30th, $338,216.97. The city, acting by the Public Service Commission, appealed from so much of this determination as decided that there was due the contractor for emergency ven-

tilation work during the year 1905, $29,141.73, on the ground that the same had been paid, leaving the total balance $309,075.24, instead of $338,216.97, and appointed Mr. Frank Brainard as arbitrator on its part.

The contractor appealed from the determination of the engineer claiming an award of $6,225,793.52 as the reasonable value of the work done and materials furnished, not allowed by the engineer, and appointed Ex-Justice Morgan J. O'Brien as arbitrator on his part. Thereafter, on December 31, 1907, the Commission and the contractor selected Mr. Charles E. Rushmore to act as third arbitrator.

Sale of Electric Current.—An action was begun by the Rapid Transit Board to restrain the Interborough Rapid Transit Company and the New York City Interborough Railway Company, the former from furnishing and delivering, the latter from receiving and using, electrical current through certain ducts built in connection with the subway, and for an accounting by defendants for the reasonable value of such current previously furnished and used. A decision was filed May 24, 1907, in favor of the board. An order has been entered continuing the action in the name of the city by the Public Service Commission, and an interlocutory judgment has been entered in favor of the plaintiff. The defendants have appealed therefrom to the Appellate Division, but the appeal has not yet been argued.

Weighing Machine Case.— This is an action brought by the Rapid Transit Board to restrain the Interborough Rapid Transit Company from maintaining in any station stands for the sale of merchandise, vending machines and weighing machines, etc. It was tried in December, 1906, and judgment was entered May 3, 1907, in favor of the defendants. An appeal was taken by the Rapid Transit Board, and an order has been entered continuing this action in the name of the city and the Public Service Commission. Under the direction of the Commission the appeal is being prosecuted, but has not yet been reached for argument.

Potter Case.— This action by an abutting property owner to restrain the Interborough Rapid Transit Company and the Rapid Transit Board from removing a wall at the Wall street station of

the Brooklyn-Manhattan subway, involves questions as to the right to use the street for railroad purposes and of the property owner to have and use vault space therein. The case was tried in December, 1906, and a decision filed in favor of the defendants in June, 1907. No appeal has yet been taken.

III. IMPROVEMENTS IN TRANSIT FACILITIES.

As affecting transit facilities, the creation of the Public Service Commission had a two-fold object — the building of rapid transit lines, and the improvement of the service of existing surface, subway and elevated roads. The first has been considered in the pages just preceding; the second will be treated here.

The Public Service Commissions Law imposes upon every common carrier the duty of providing safe and adequate facilities for the transportation of persons and commodities. Upon every such company, there falls in first instance the obligation to arrange schedules, routes and headways; to hire, train and superintend employees; to pay them proper salaries and to arrange reasonable hours of labor; to construct, equip and maintain a suitable roadway, rolling stock, power stations, car barns, repair shops, depots, etc.; in fact to do everything connected with the operation of the road and to do it in such a way that the service shall be safe, adequate, reasonable and proper. All charges for transportation must be just and reasonable, and no discrimination shall be made against any individual or individuals of a class.

It is not the function of the Public Service Commission to order any of these things to be done until the company has been found to be delinquent, and the power of the Commission begins when the company omits to fulfill its obligations. The procedure in any given instance, therefore, is of a two-fold nature. The default of the company must be established, and the steps which it must take must be decided upon. Then, if the company has been operating too few cars, or is not maintaining its equipment, or is charging too high rates, or in any other way is at fault, the Commission has the power, and is burdened with the duty, to

direct what shall or shall not be done. But in every instance, the obligations to provide proper service, to charge proper rates, etc., is originally upon the private company.

It should not be inferred that the Commission may initiate proceedings to cure a defect only upon complaint. It may investigate and issue an order upon complaint or upon its own motion. A Transportation Bureau composed of engineers and inspectors has been organized for the express purpose of obtaining accurate information as to the operation of all companies. Service inspections are constantly being made not only to determine whether new orders should be issued, but also to ascertain whether the orders are being obeyed.

The usual course followed in all cases where there is apparently sufficient evidence to justify an order has been as follows:

First.—An order for a hearing is adopted by the Commission upon the recommendation of a Commissioner who has gone over the evidence collected by the Transportation Bureau or presented by a complainant and who has concluded that the matter should be tried out. The order fixes a date for the hearing, usually about two weeks in advance and specifies what is proposed to be required, so as to allow the company sufficient time after the service of the notice of the order, to prepare such evidence as it may wish to present.

Second.— One Commissioner is named, usually the one who went over the evidence originally, to preside at the hearing and take evidence.

Third.— The hearing is held upon the date fixed at which time some one from the office of the counsel to the Commission appears and generally a legal representative of the company. All evidence germane to the subject under investigation, from whatever source, is admissible, and the hearing may be adjourned from day to day as necessary.

Fourth.— When the evidence is all in, the presiding Commissioner reports of his findings to the Commission with a proposed order for adoption, which specifies what shall be done or omitted to be done by the company. If the evidence shows that the requirements in the order for the hearing should be modified, such

changes are made. If the order meets with the approval of the Commission, it is enacted and a date fixed when it shall take effect.

Fifth.— Notice of this action is then served upon the company, which must reply whether it will accept the order or apply for a rehearing. If a rehearing is requested, and granted by the Commission (during the past six months it has never been refused), the same procedure as above outlined is followed.

In many instances where a specific complaint is made and where it seems desirable to have a definite reply from the corporation complained against, before any action is taken by the Commission, the first step named above is preceded by the adoption of a complaint order by the Commission which embodies the complaint, orders it transmitted to the company concerned and directs that within ten days thereafter the complaint shall be satisfied or a reply made to the Commission. When this reply is received it is referred to one Commissioner, who examines it and recommends whether an order for a hearing shall be issued or the complaint dismissed. Of course, if the company satisfies the complaint, notice is served upon the complainant and the case closed.

Such has been the course pursued in all of the cases relating to improvements in service, equipment, roadway, stations, etc. The orders issued are printed in full in an appendix to this report: Only the substance of the matter considered and of the order issued is given below. During the six months just closed the Commission issued 186 orders. Of these, 84 were complaint orders of the nature described in the preceding paragraph; 46 were orders for hearings; 42 were final orders; and 14 were general orders calling for information. At the end of the year there were 15 cases pending in which final orders had not yet been reported for adoption.

A. MANHATTAN AND THE BRONX — SUBWAY AND ELEVATED LINES.

The crowded and uncomfortable conditions upon these lines during the rush hours was one of the first matters considered by the Commission. The usual hearings (see Orders Nos. 13 and

14) were ordered to determine the necessity of requiring a 20 per cent. increase in the service for a period of one hour and a half both before and after the operation of the prevailing fullest schedule in each and every day except Sundays and holidays and other increases on Sundays and holidays, and also upon the question whether it would be just and reasonable to require the company to run between the hours of 6:00 a. m. and 10:00 p. m. daily, a number of through trains to and from West Farms over the Second and Third avenue elevated roads, so that one-half of the trains between One Hundred and Forty-ninth street and West Farms should be subway trains, one-fourth Third avenue elevated trains, and one-fourth Second avenue elevated trains, running alternately.

The order (No. 33) as issued called for the following service except on Saturday afternoon, Sundays and holidays:

Subway Express.

(1) South bound, at Grand Central Station, from 7:00 to 7:30 a. m., by an increase of 16 cars, rendered by 2 trains from West Farms, upon said line.

(2) South bound, at Grand Central Station, from 8:30 to 9:00 a. m., by an increase of 8 cars, rendered by 1 train from West Farms, upon said line.

(3) North bound, at Fourteenth street station, from 5:00 to 5:30 p. m., by an increase of 8 cars, rendered by 1 train to West Farms, upon said line.

(4) North bound, at Fourteenth street station, from 6:30 to 6:45 p. m., by an increase of 8 cars, rendered by 1 train to West Farms, upon said line.

Second Avenue Elevated.

(1) North bound, at Forty-second street station, from 6:10 to 6:50 a. m., by an increase of 16 cars.

(2) South bound, at Thirty-fourth street station, from 6:15 to 7 a. m., by an increase of 21 cars, rendered by 3 trains of 7 cars each, from One Hundred and Twenty-ninth street to South ferry.

(3) South bound, at Thirty-fourth street station, from 7 to

8:30 a. m., by an increase of 21 cars, rendered by 3 trains of 7 cars each, from One Hundred and Twenty-ninth street to South ferry.

(4) North bound, at Forty-second street station, from 5 to 6:30 p. m., by an increase of 21 cars, rendered by 3 trains of 7 cars each from South ferry to One Hundred and Twenty-ninth street.

(5) North bound, at Forty-second street station, from 6:30 to 7 p. m., by an increase of 14 cars, rendered by 2 trains of 7 cars each, from South ferry to One Hundred and Twenty-ninth street.

(6) North bound, at Forty-second street station, from 7:15 to 8:09 p. m., by an increase of 20 cars.

(7) North bound, at Forty-second street station, from 8:31 to 9:08 p. m., by an increase of 10 cars.

Third Avenue Elevated.

(1) South bound, at Thirty-fourth street station, from 6 to 6:30 a. m., by an increase of 7 cars, rendered by 1 train of 7 cars, from One Hundred and Seventy-ninth street or Bronx park.

(2) South bound, at Thirty-fourth street station, from 6:30 to 7 a. m., by 14 cars, rendered by 2 trains of 7 cars each, from One Hundred and Seventy-ninth street or Bronx park to City Hall.

(3) South bound, at Thirty-fourth street station, from 7 to 8 a. m., by an increase of 28 cars, rendered by 4 trains of 7 cars each, from One Hundred and Seventy-ninth street or Bronx park to City Hall.

(4) South bound, at Thirty-fourth street station, from 8:30 to 9 a. m., by an increase of 28 cars, rendered by 4 trains of 7 cars each, from One Hundred and Twenty-ninth street to City Hall.

(5) North bound, at Forty-second street station, from 5 to 6 p. m., by an increase of 42 cars, rendered by 6 trains of 7 cars each, from City Hall to One Hundred and Seventy-ninth street.

(6) North bound, at Forty-second street station, from 6:30 to 7 p. m., by an increase of 7 cars, rendered by 1 train of 7 cars, from City Hall to Bronx park.

(7) North bound, at Forty-second street station, from 7 to 7:45 p. m., by an increase of 14 cars, rendered by 2 trains of 7 cars each, from City Hall to Bronx park or One Hundred and Seventy-ninth street.

(8) North bound, at Forty-second street station, from 9:11 to 9:36 p. m., by an increase of 10 cars.

Sixth Avenue Elevated.

(1) South bound, at Fiftieth street station, from 7:30 to 9 a. m., by an increase of 28 cars, to the trains from Harlem.

(2) North bound, at Fiftieth street station, from 5 to 6:30 p. m., by an increase of 33 cars, to the Harlem trains.

Ninth Avenue Elevated.

At Thirty-fourth street station, north bound, from 5 to 6 p. m., by an increase of 18 cars, rendered by 3 trains of 6 cars each, from Rector street to One Hundred and Thirty-fifth street.

Frequent conferences between the officials of the Interborough Rapid Transit Company and of the Commission followed the issuance of this order. Inspections were made by employees of the Commission, and opportunities for improving the service pointed out informally to the company. Much benefit resulted, but as the service was still inadequate, another order (No. 111) was prepared which called for:

Subway Express Service.

(1) South bound, at Grand Central Station, from 7 to 11 a. m., by an increase of 80 cars, or by an increase from 816 to 896 cars.

(2) South bound, at Grand Central Station, from 1 to 2:30 p. m., by an increase of 30 cars, or by an increase from 180 to 210 cars.

(3) North bound, at Fourteenth street station, from 2:30 to 8:30 p. m., by an increase of 166 cars, or by an increase from 1,010 to 1,176 cars.

Subway Local Service.

(1) South bound, at Grand Central Station, from 7:30 to 9:30 a. m., by an increase of 20 cars, or by an increase from 280 to 300 cars.

(2) North bound, at Times Square station, from 5 to 7 p. m., by an increase of 5 cars, or by an increase from 295 to 300 cars.

(3) North bound, at Times Square station, from 11 to 11:30 p. m., by an increase of 15 cars, or by an increase from 345 to 360 cars.

At the hearing it was stated by the counsel for the company that the service on this road would be supplemented to include all the increase suggested, and that as a matter of fact, such increased service would be in operation as soon as the Brooklyn extension, via Battery Park to City Hall, Brooklyn, was in operation.

Other orders (Nos. 135, 145, 150 and 151) for hearings against the Interborough Rapid Transit Company have also been issued to consider the following increases:

Ninth Avenue Elevated.

"(1) South bound, at Thirty-fourth street station, between 6:30 and 9:00 a. m., daily except on Sundays and holidays, by an increase of 58 cars — from 222 cars to 280 cars.

"(2) North bound, at Thirty-fourth street station, 4:30 to 7:00 p. m., daily except on Sundays, by an increase of 62 cars — from 252 cars to 314 cars."

Third Avenue Elevated.

"(1) South bound, at Thirty-fourth street station, from 6:30 to 9:30 a. m., daily except Sundays, by an increase of 91 cars — from 875 cars to 966 cars.

"(2) North bound, at Forty-second street station, from 4:30 to 7:30 p. m. by an increase of 139 cars — from 799 cars to 938 cars."

Sixth Avenue Elevated.

"(1) South bound, at Fiftieth street station, between 7:30 and 9:00 a. m., by an increase of 84 cars — from 278 cars to 362 cars.

"(2) North bound, at the Fiftieth street station, between 4:30 and 7:00 p. m., by an increase of 77 cars — from 519 to 596 cars."

Second Avenue Elevated.

"(1) South bound, at Thirty-fourth street station, between 7:00 and 9:00 a. m., by an increase of 87 cars — from 361 cars to 448 cars.

"(2) South bound, at the Thirty-fourth street station, between 10:30 and 11:30 a. m., by an increase of 12 cars — from 45 cars to 57 cars.

"(3) North bound at Forty-second street station, between 3:00 and 7:00 p. m., by an increase of 103 cars — from 472 cars to 575 cars.

"(4) North bound, at the Forty-second street station, between 9:00 and 10:00 p. m., by an increase of 16 cars — from 34 cars to 50 cars."

These orders are still pending, the cases not having been finished at the close of the year. Complaints were made as to the service given by the Third and Second avenue elevated roads, with particular reference to the lack of and need for through trains between the Bronx borough and South Ferry on the Second avenue elevated road, in place of the service being given, which required a change of cars at One Hundred and Twenty-ninth street, One Hundred and Twenty-seventh street, Canal street and Chatham square (see Orders Nos. 157 and 160). The complainant's statement of the service was admitted by the company, but it was asserted that because of the limitations as to train pocket capacity at South Ferry, and the nature of the construction of the tracks and station at One Hundred and Twenty-ninth street, no greater through service could be given, that the tracks above the Harlem river were now occupied to their full capacity, and that to add Second avenue through trains would require the withdrawing of Third avenue through trains, which if done would inconvenience many more passengers than it would convenience. The complaint was dismissed, without prejudice, however, to any further or additional hearings and actions in respect to any other matters covered by the complaint, or to the proceedings already taken thereon. (See Orders Nos. 177 and 178.)

Complaint was also received against this corporation that there is no method at present by which a resident in the Bronx can

reach a point on the elevated road south of Chatham square by either the Second or Third avenue elevated lines, as all of the South Ferry trains on the Third avenue line start from and return to One Hundred and Twenty-ninth street, and all the trains on the Second avenue line that start at One Hundred and Twenty-ninth street, return to the same place, and the trains on the Second avenue line which start in the Bronx, go no further than Canal street, and start at that point coming north.

A hearing was held (see Order No. 160), but the evidence was not sufficient to justify a change, and the complaint was dismissed (Order No. 177).

Block Signals.—As result of investigations made by engineers of the Commission, hearings have just been begun to inquire whether, in order to promote the safety and convenience of the public and the employees of the company, the local track of the subway should not be fully equipped with a block signal system, or some adequate safety device system for the prevention of accidents. Reference is made in the chapter on accidents to this proceeding and the conditions which brought it about. It also was unfinished upon December 31st.

Additional Stairways.— The stairway facilities at the subway stations at One Hundred Thirty-seventh street and Broadway and at One Hundred Forty-fifth street and Broadway have been found to be inadequate. An order (No. 24) has been issued requiring the Interborough Rapid Transit Company to obtain proposals for the construction of the stairways in accordance with the plans and specifications approved by the Commission, such proposals to be approved by the Commission before any work is done.

Eight Hour Law.— Complaint was made to the Commission under date of October 7, 1907, that the Interborough Rapid Transit Company was working employees from nine to twelve hours per day at various places mentioned, in violation of the provisions of the Laws of 1907, chapter 627, which limits the hours of labor of certain railroad employees to eight hours per day, and provides for the imposition of a fine for requiring longer service..

In response to a complaint order (No. 37), the company denied violation of law, claiming that the law was not applicable to the employees mentioned in the complaint. A hearing was therefore ordered (No. 59), at which it appeared that the men mentioned in the complaint were not such employees as would come within the prohibition of the law cited. The complaint was thereupon dismissed (Order No. 112).

B. MANHATTAN SURFACE LINES.

Broadway.— The early complaints regarding the Broadway service had reference principally to the switching back of southbound cars at Houston street requiring passengers to unload and obtain seats in the car ahead or the following car, often already overloaded, and to the inconvenience and annoyance to passengers resulting from the lack of designation signs.

The first order for a hearing (No. 15) was served upon the New York City Railway Company, but early in the proceedings it was found that the Forty-second street, Manhattanville and St. Nicholas Avenue Railway Company also operated cars on Broadway from Forty-fifth street south to Houston street under an agreement with the New York City Railway Company, and that, generally speaking, the cars of this line were the ones switched back at Houston street. Hence a new order (No. 25), similar to the one served on the New York City Railway Company, was issued and served on the Forty-second street, Manhattanville and St. Nicholas Avenue Railway Company.

During the course of the inquiry, the New York City Railway Company was placed in the hands of receivers. The receivers were duly notified of the hearing and under date of October 7th wrote the following letter addressed to the counsel to the Commission:

"DEAR SIR:

"We beg to acknowledge the receipt from you of duplicate notices of hearings to be held in the above proceedings on October 9, 1907, at 11 a. m.

"As receivers of the New York City Railway Company, we have applied to the Honorable E. Henry Lacombe, Circuit Judge, for instructions on this subject and enclose herewith a copy of the memorandum filed by him thereon. As you will note, it is the view of the court that we should not appear, as receivers, in the proceedings before the Commission. We have been informed, however, that the owners of the property will be represented by counsel and take such action as they may be advised.

"Although we shall not be represented, it is our desire as receivers to facilitate the efforts of the Commission in every way possible, and any source of information under our control, whether in the form of books and records or the knowledge and practical experience of any of our employees, will always be at the disposal of the Commission.

"If you will advise us when the attendance of any of our employees is required we will arrange to have them present without the necessity of a formal subpoena. We suggest, however, that in view of the unusual demands upon the time of our working force for the preparation of statements and inventories and other urgent work incidental to the receivership, it is desirable that we should have as long notice in advance as possible in order to arrange for such attendance without crippling the routine business of our office.

"Yours very truly,

"(Signed) ADRIAN H. JOLINE,

"(Signed) DOUGLAS ROBINSON,

"Receivers.

"ABEL E. BLACKMAR, Esq.,

"*Counsel to the Public Service Commission*

"*for the First District,*

"154 Nassau street, New York."

There was enclosed a memorandum of instructions given by Judge Lacombe to the receivers, as follows:

"UNITED STATES CIRCUIT COURT,
"SOUTHERN DISTRICT OF NEW YORK.

"The Pennsylvania Steel Company and Another,
vs.
"The New York City Railway Company.

"LACOMBE, C. J.— Application is made by receivers for instructions of the Court as to whether they should appear and participate in the investigation now being conducted by the Public Service Commission touching improvements to be made on the property and in the methods of its operation. It would seem unnecessary for them to do so. Their occupancy of the leased property is but temporary; presumably it will not extend — at least for operation,— beyond a year, and it is to be hoped that it may be ended sooner. They are not practical street railroad men, have had only a few days experience with this property and could contribute nothing to the solution of the problem before the Commission. The former operators and owners of the road are the persons from whom information as to existing conditions and the probable results of proposed changes is to be obtained. All books in the custody of the receivers and all persons in their employ, who may be called as witnesses, will of course be at the service of the Commission and it is to be supposed that the owners will continue to be represented at the hearing and to conduct their side of the investigation because, to whatever extent the income from the property may enable the receivers to carry out the improvements called for by the Commission, the ultimate burden of them all will fall upon the property.

September 30, 1907."

No representative of the receivers appeared in this case or in any other during the six months just closed, but the hearings con-

tinued and the following finding was approved by the Commission (for full report see the Minutes):

* * * *

"The evidence presented by the inspectors of the Commission and Mr. Oren Root, general manager of the company, shows that the service between 6 a. m., and 7 p. m. has not been sufficient to provide seats for the passengers; that many cars have been switched back at Houston street which should be sent through, at least as far as Murray street, to accommodate the traffic; that approximately one-quarter of the cars switched back at Houston street should be sent further down town, at least to Murray street; that the cars which have been run through to South Ferry have borne no destination signs indicating this fact; and that the congestion upon other cars has been increased because of this fact.

"Sufficient data are not available at this moment to indicate whether the service upon the lines run in connection with the Broadway line is inadequate (further observations will need to be taken), but an order may be issued without delay in relation to the service on Broadway south of Houston street. * * *"

Owing to the fact that two companies operated cars on Broadway, it was necessary to issue two orders (Nos. 43 and 44), the substance of which was as follows:

The service of the New York City Railway Company was to be supplemented and changed:

"First. By running on Broadway, south of Houston street, at least as far as Murray street, all cars operated by the New York City Railway Company on its Broadway lines, between the hours of six o'clock in the morning and seven o'clock in the evening, except such cars as may be disabled or cars on which repairs may be immediately necessary.

"Second. By providing and conspicuously displaying on each car run over any of its Broadway lines a destination sign which shall clearly state and show the destination of the car."

The Forty-second Street, Manhattanville and St. Nicholas Avenue Railway Company was ordered to supplement and change its service:

"First. By running on Broadway south of Houston street at least as far as Murray street no less than one car in every four

cars operated by it south of Forty-sixth street; *provided, however,* that between the hours of six o'clock and nine o'clock in the morning, daily except Sundays, the said Forty-second Street, Manhattanville and St. Nicholas Avenue Railway Company shall run south of Houston street at least as far as Murray street on Broadway a minimum number of seventeen cars; and that between the hours of nine o'clock in the morning and four o'clock in the afternoon, daily except Sundays, the said railway company shall run south of Houston street at least to Murray street on Broadway a minimum number of fifty cars; and that between the hours of four o'clock and seven o'clock in the afternoon, daily except Sundays, the said railway company shall run south of Houston street at least to Murray street and Broadway a minimum number of forty cars.

"Second. By providing and conspicuously displaying on each car run over its Broadway line a destination sign which shall clearly state and show the destination of the car."

These orders were duly served, and their receipt duly acknowledged by the receivers for the New York City Railway Company, and by the Forty-second Street, Manhattanville and St. Nicholas Avenue Railroad Company, with a statement that they would be obeyed. Subsequently, on application of the corporations interested, sufficient cause being shown, the date when the orders should take effect was extended (see Orders Nos. 62 and 63.)

Another order (No. 149) for increased service upon the Broadway line particularly from Thirtieth street to One Hundred and Thirtieth street is now being considered and several hearings have been held.

Fourth and Madison Avenue Line.— The conditions upon this line were taken up almost immediately after the organization of the Commission (Order No. 10). But the appointment of the receivers and the extent of the evidence presented by the company delayed final action until fall. The report submitted by the presiding Commissioner and approved by the Commission in part was as follows (for full text see Minutes):

"The evidence taken at the hearings was given by Mr. M. H. Ryan, of the engineering staff of the Commission, and Mr. Oren Root, vice-president and general manager of the New York City

Railway Company. Mr. Ryan, with the assistance of a number of other engineers from the staff of the Commission, had made a careful and thorough investigation of the service and equipment of the line and of the extent of interference with such service by vehicular traffic, extending over a number of days in July, August and September, and presented a summary of this investigation in the form of tables and diagrammatic charts (which were placed in evidence and appear among the exhibits). Ample opportunity was given to the counsel for the street railway company to examine this evidence and to cross-examine Mr. Ryan, but the oppportunity to cross-examine was not availed of. * *

"The critical points upon this line, from the viewpoint of a possible increase in service, are three: Forty-second street between Madison and Fourth avenues, and the intersections of Twenty-third street and Fourth avenue and of Grand street and the Bowery. The first two points affect all of the cars run over the line, the last only those running below Astor place.

"Mr. Root urged for the railroad company, as one reason why a better service had not been given, that it was impossible to pass a greater number of cars through these points than had been sent through, but he afterwards modified it (page 19 of evidence of September 16th) to say that these limitations applied only to the rush hours between 5 and 6:30 p. m.

"The reports of observations made by Mr. Ryan and his assistants (exhibits 30 to 35) clearly show that even during rush hours a much larger number of cars could be sent north and south at the intersection of Twenty-third street and Fourth avenue, thus definitely removing this point from consideration as a limiting factor.

"As to Forty-second street between Madison and Fourth avenues, Mr. Ryan's evidence (exhibits 7, 8 and 9) shows that even under present conditions it would be possible to pass many more cars through Forty-second street during the rush hours, and that during the remainder of the day a sufficient number of cars could be sent through to give adequate service. These facts were not denied by Mr. Root.

"The congestion of vehicular and street car traffic was greatest at the intersection of Grand street and the Bowery. Mr.

Ryan's evidence (exhibits 6 and 10) indicate that no more cars could be operated through this intersection during the evening rush hours. The traffic upon other lines at this point is very heavy, and relief is much more needed upon them than upon the Madison avenue line. For this reason I have not recommended an increase in service during the evening rush hours below Astor place. It will be necessary to consider this phase of the problem more fully and to attempt to solve the congestion by rearrangement of the tracks or runs.

"To determine whether the service was adequate or inadequate, Mr. Ryan and his assistants made a large number of observation at different points and upon different days.

"This evidence (see specially exhibits 2 to 5, 9, 13 to 15, 25a, 27 to 29, 31 and 32) shows that the service was inadequate to a greater or less degree during:

"(1) The morning and evening rush hours. The number of persons standing at these hours was often very large. The congestion was worse during the evening than in the morning owing to the fact that the rush period in the evening is shorter than in the morning.

"(2) The hours immediately preceding and following the rush hours: The extent of inadequacy was not so great as at the height of the rush hours and would have been much less if the schedule in force at the height of the traffic had been extended into the periods immediately preceding and following it.

"(3) The early evening hours: An insufficient number of cars was run to accommodate the persons going to and from the theatres or to make social calls.

"(4) The hours between noon and midnight upon Sundays, particularly just after noon and in the late evening. No explanation was offered for the inadequacy of the service upon Sunday. The number of passengers is very much less than upon any week day, and there is practically no vehicular traffic to interfere at any point upon the line (see page 20 of the evidence of September 23d).

"The service was also shown to be unsatisfactory in the following regards:

"(5) Not infrequently cars were switched back at Eighty-

sixth street which contained a number of passengers, who were unable to find seats in the car following (see exhibit 17).

"(6) Many of the cars did not bear a sign showing the destination of the run. This caused considerable inconvenience to the public and not infrequently accentuated the crowding in other cars, for persons would wait until they found a car having the proper destination sign.

"(7) No 'run numbers' were displayed upon any of the cars, rendering it impossible to compare the actual operation of the cars with the schedule (see pages 89 and 90 of the evidence of September 23).

"The traffic returns presented by Mr. Root (see exhibits 20 to 25) were not in the same form as the returns presented by Mr. Ryan. Mr. Root reported for each half hour the total seating capacity of the cars passing certain points, and the approximate number of passengers therein. The data in this form do not show how many persons were standing, or how many cars were overloaded, for unless the total number of vacant seats in all cars for the whole period was less than the total number of persons standing, the service would appear to be adequate. But every traffic manager knows and Mr. Root admitted (see pages 98 to 101 of the evidence of September 23d) that it is impossible to run the cars in such a manner that the seats are filled in all cars without having a large number of persons standing on many of the cars, and also that even where the tables showed that the number of vacant seats in certain cars did not exceed the number of persons standing in others, there must have been a considerable number of cars in which there were many persons standing. Further, it is true that at the beginning of a given half hour there might be a number of vacant seats and at the end of the half hour there might be a large number of persons standing, but if the two equalized each other, the diagrams would show the service to be adequate; it being little satisfaction to the passenger to know that there is a seat in some other car or that there is a seat to be had at some other time of the day, if it is not available when he wishes to use it. Thus analyzed, even the evidence presented by Mr. Root supports that presented by Mr. Ryan and demon-

strates that for considerable periods during each day, Sundays as well as week days, the service on the Madison avenue line was inadequate and unsatisfactory. * *

" The one reason finally urged by Mr. Root why a larger number of cars had not been run, and why the service could not be improved was that sufficient employees — motormen and conductors — could not be secured. (Pages 166 to 199 of the evidence of October 9th, and particularly pages 183, 189 and 191.) It is, perhaps, true that with the present wages, hours of labor method of payment, uniforms, and conditions of labor, a larger number of competent men could not be secured, but as these conditions are self-imposed and may be altered by the company at any time, and as the work is not hazardous or calling for any unusual amount of skill, it does not seem that the existence of conditions which may be altered by the company itself should be considered a bar to the maintenance of adequate service. If the conditions were to be made less attractive by the company than at present, a smaller number of men would work than are now working, and then this fact could be offered as a valid reason why the service should be made less adequate than at present. If the present conditions were bettered, the company would doubtless secure the requisite number of competent men. * * "

The order (No. 52) was in conformity with these recommendations and provided that the service should be improved as follows:

First. By running south from One Hundred and Thirty-fifth street, daily except on Sunday, cars as follows:

Between 1 a. m. and 5 a. m., not less than six (6) cars per hour, to run at least as far south as Brooklyn bridge.

Between 5 a. m. and 9 a. m., not less than one hundred and twenty (120) cars, to run at least as far south as Astor place.

Between 9 a. m. and 5 p. m., not less than three hundred and sixty (360) cars, to run at least as far south as Astor place.

Between 5 p. m. and 9 p. m., not less than one hundred and twenty (120) cars, to run at least as far south as Astor place.

Between 9 p. m. and 1 a. m., not less than one hundred (100) cars, to run at least as far south as Astor place.

Second. By running in addition to the cars prescribed in paragraph "First" above, south from One Hundred and Sixteenth street, daily except Sunday, cars as follows:

Between 5 a. m. and 9 a. m., not less than sixty (60) cars, to run at least as far south as Astor place.

Between 9 a. m. and 5 p. m., not less than forty (40) cars, to run at least as far south as Astor place.

Between 5 p. m. and 9 p. m., not less than forty (40) cars, to run at least as far south as Astor place.

Third. By running north from Brooklyn bridge at least as far north as One Hundred and Sixteenth street, daily except Sunday, cars as follows:

Between 6 a. m. and 9 a. m., not less than ninety (90) cars.

Between 9 a. m. and 4:30 p. m., not less than two hundred and thirty (230) cars.

Between 4:30 p. m. and 9 p. m., not less than one hundred and ten (110) cars.

Between 9 p. m. and 1 a. m., not less than seventy (70) cars.

Fourth. By running north from Astor place, in addition to the cars prescribed in paragraph "Third" above, daily except Sunday, at least as far north as One Hundred and Sixteenth street, cars as follows:

Between 5 p. m. and 9 p. m., not less than one hundred and forty (140) cars.

Between 9 p. m. and 1 a. m., not less than sixty (60) cars.

Fifth. By running on Sundays south from One Hundred and Thirty-fifth street, cars as follows:

Between 1 a. m. and 5 a. m., not less than six (6) cars in each hour, to run as far south as Ann street.

Between 5 a. m. and 10 a. m., not less than one hundred (100) cars, to run as far south as Ann street.

Between 10 a. m. and 1 p. m., not less than one hundred and forty (140) cars, to run at least as far south as Astor place.

Between 1 p. m. and 7 p. m., not less than three hundred (300) cars, to run at least as far south as Astor place.

Between 7 p. m. and 1 a. m., not less than two hundred and forty (240) cars, to run at least as far south as Astor place.

Sixth. By running on Sundays, north from Ann street, cars as follows, to run at least as far north as One Hundred and Sixteenth street:

Between 10 a. m. and 1 p. m., not less than ninety (90) cars.

Between 1 p. m. and 7 p. m., not less than two hundred (200) cars.

Between 7 p. m. and 1 a. m., not less than one hundred and eighty (180) cars.

Seventh. By running on Sundays, in addition to the cars prescribed in paragraph "Sixth" above, north from Astor place, at least as far north as One Hundred and Sixteenth street, cars as follows:

Between 10 a. m. and 1 p. m., not less than sixty (60) cars.

Between 1 p. m. and 7 p. m., not less than one hundred and twenty (120) cars.

Between 7 p. m. and 1 a. m., not less than ninety (90) cars.

This order was served on the receivers of the New York City Railway Company and a proper acknowledgment of its receipt made by them, with the statement that it would be obeyed.

The Eighth Avenue Line.— The conditions on this line were taken up in November (see Order No. 114). The line is a part of the New York City Railway Company, but neither the receivers nor the company appeared at the hearings. The findings reported by the commissioner in charge contained the following (for full report see Minutes):

"The only section of this line which is congested by vehicular and street car traffic is that on West Broadway, between Canal street and Cortlandt street; but as the present service is adequate upon this section of the route, and as it is not proposed to recommend that more cars be run below Thirteenth street, the fact of congestion upon West Broadway does not interfere with the proposed increase of service above Thirteenth street. In other words, there is no congestion of traffic upon any portion of the line which will interfere with the execution of the order recommended in this report (see pages 15-17 of evidence). * *

"Summarizing the evidence presented, the following facts clearly appear (see especially exhibits 2-5):

"(1) The service upon the portion of the line south of Thirteenth street is adequate.

"(2) During the hours between midnight and six in the morning, the operating schedule of the company calls for a twenty-minute headway most of the time. Although this schedule has been sufficient to give every passenger a seat, in my opinion such a service is not adequate for the district above Thirteenth street. Persons ought not to be required to wait twenty minutes upon a street corner, especially during the winter, for a car to take them home. If there were stations or some sort of structures to protect persons from the inclemency of the weather, it might be inadvisable to require more cars to be run, but in view of the present circumstances, I have recommended that at least six cars an hour be run, reducing the headway from twenty to ten minutes, above Thirteenth street. Below Thirteenth street the district is almost wholly a business district and the traffic is so very light during the night that it does not seem reasonable to require an increased service even though the present schedule calls for a twenty-minute headway.

"(3) Upon Sundays the service north of Thirteenth street is more or less inadequate from 10 a. m. to 11 p. m., and there seems to be no reason, except in occasional instances which cannot be foreseen, why a sufficient number of cars should not be run to provide seats for all passengers.

"(4) The southbound service upon week days is inadequate during the morning rush hours and in the early part of the evening, when persons are going to the theatres or making social calls. The order recommended for adoption calls for certain reasonable increases in the number of cars run between 7 and 10 a. m. and between 6:30 and 8:30 p. m.

"(5) The northbound service is inadequate between 4:30 and 6:30 p. m.— the evening rush hours — and between 10:00 and 11:30 p. m., when persons are returning from the theaters. The increased service required in the order is not large in either of these cases, but will be sufficient to reduce the number of passengers standing to an inconsiderable amount."

The order (No. 171) was in substance that the receivers and the company should increase the service:

(1) By running south from One Hundred and Forty-ninth street, daily except Sunday, cars as follows:

Between 7 a. m. and 10 a. m., not less than one hundred and ten (110) cars to run at least as far south as Thirteenth street.

Between 6:30 p. m. and 8:30 p. m., not less than seventy (70) cars, to run at least as far south as Thirteenth street.

(2) By running north from Thirteenth street, daily except on Sunday, cars as follows:

Between 4:30 p. m. and 6:30 p. m., not less than one hundred and thirty cars (130), to run at least as far north as One Hundred and Forty-ninth street.

Between 10 p. m. and 11:30 p. m., not less than fifty (50) cars, to run at least as far north as One Hundred and Forty-ninth street.

(3) By running on Sundays, south from One Hundred and Forty-ninth street, cars as follows:

Between 10 a. m. and 11:30 p. m., not less than six hundred (600) cars to run at least as far south as Thirteenth street.

(4) By running not less than six (6) cars in each hour of the night and morning, daily and Sundays, from Thirteenth street north to One Hundred and Forty-ninth street, and from One Hundred and Forty-ninth street south at least to Thirteenth street, the cars to be as evenly distributed as possible in each hour.

Night work at Eighty-ninth street and Park avenue.— A final order (No. 138), dismissing a complaint against the New York Central and Hudson River Railroad Company for alleged unnecessary noises made by its gangs of workingmen and by the puffing of engines, etc., was issued by the Commission in view of the fact that the company was under obligations to the whole public of the city of New York to make extensive changes in its line along Park avenue and at Forty-second street, and that since this work, to a considerable degree, interfered with the regular running of trains it was wise to do as much of the repair work as possible in the night time. The Commissioner having the mat-

ter in charge reported that evidence had been given in hearings before the Commission that much of the delay on surface roads was caused by repair work done in the day time, and would be eliminated if the repair work were done at night.

Improved equipment and rolling stock.— One of the most frequent causes of complaint was the defective condition of the equipment of the surface railroads in Manhattan. As soon as it was possible to obtain a practical street railway engineer and to organize a staff, the work of inspecting the whole system was begun in order that the Commission might have the exact facts. Mr. McLimont, the electrical engineer to the Commission, with the assistance of four electrical engineers, one mechanical engineer and a number of transit inspectors, all employees of the Commission, spent over a month upon this examination and personally inspected some 1,600 cars out of a total of about 2,000 cars being operated by the company, and 452 cars were examined in detail in the car houses while standing over the "pits," by the engineers of the Commission. They also carefully examined the power-houses, sub-stations, car houses and shops.

The condition of the 1,600 cars at the time of observation was reported to be as follows:

Total number of cars		1,600
"	with dash boards needing painting.	93
"	" bodies needing painting.....	766
"	" panels broken and unpainted..	169
"	" flat wheels.	401
"	rattling (had loose windows, doors, etc.).	786
"	with gear noises (clattering due to dry and worn gears and pinions).	1,006
"	with brass noises (worn and dry bearings).	77
"	with broken glass.....	192
"	operating without headlights.....	249
"	" with dim "	82
"	filthy.	105

Combining certain of the items in the above table, it is seen that one-quarter of the cars had flat wheels; that one-half of them

needed painting in part or in whole; that one-half rattled; that two-thirds had gear noises; that one out of every six was operated without headlights, and that over 100 cars were "filthy." Upon an average there were nearly five defects to every two cars. This does not mean that every car needed repairs of some sort or other, but upon an average there were between two and three defects for each car, for many of the cars were defective in several regards.

The condition of the 452 cars examined more in detail while standing over the "pits" in the car houses was reported to have been as follows:

Total number of cars inspected	452
" with defective trucks	115
" " flat wheels	84
" " defective brakes	83
" " gear troubles (excessively worn)	242
" " bearing troubles (excessively worn and loose)	154
Total number of cars with motor troubles	258
Total number of cars with plow troubles (worn and loose parts and pinions)	17
Total number of cars with controller faults	45
" " switches broken or missing	9
" " resistances poorly protected	102
" " wiring worn or loose	159
" " headlights broken or loose	85
" " gates loose, worn or bent	3
" " platform worn	6
" " bumper sprung or cracked	4
" " draw-bar missing or cracked	3
" " stanchion bent or worn	7
" " guard rail bent or worn	4
" " hand rail bent or worn	9
" " grab handles bent or worn	19
" " running boards broken or worn	8
" rattling	1

Total number of cars with dash board bent or worn.....		57
Total number of cars with dash board bent or worn.....		57
"	" dash posts bent or worn.....	13
"	" glass broken	52
"	" broken curtain cords, etc.....	4
"	" signs or reflectors broken or missing	4
"	needing painting	144
"	with roof gutters bent.....	4
"	" life guard bent or broken..	9
"	" steps insecure or broken...	38
"	" no headlight operating.....	41
"	" panels broken or unpainted.	1
"	in filthy condition	4

Summarizing the results of this examination, which covered a considerable number of matters not possible to be covered in the other 1,200 cars, it was found that upon an average there were four defects to each car.

The report of the commissioner presiding at the hearing, which was ordered (No. 148) after the submission of the report from the transportation bureau, continues:

"The effect of these conditions upon the carrying capacity of the system is reflected by the reports of the repair shop. At one barn where the cars seemed to be in worse condition than at any other the average *daily* number of instances where cars were 'run in' for repairs during the month of November, was nearly 10 per cent. of the number of cars housed there, and upon one day the number of 'run ins' was over 70 per cent. of the number of cars. Upon the whole system during the month of October there were between 12,000 and 13,000 hours that cars were 'run in' for emergency defects, which is equivalent to thirty cars taken off the road entirely for fifteen hours during every day of the month. The interference with the operation of the system, due to the bad condition of the equipment, is not confined to the loss of time cars are standing in the barns awaiting or undergoing repairs, for when a car breaks down on the line it is out of commission from that moment as well as during the time it is in the shop. It must also be shoved back to the barn and this procedure

still further interferes with the schedule, is often the cause of much delay and overcrowding in other cars, and congests vehicular traffic as well.

"In their letter to the Commission the receivers state:

> 'The most frequent causes of breakdown are those peculiarly incident to the operation of cars by the conduit electric system and differ from the troubles incident to the operation of surface cars by the overhead and trolley system. A very large percentage of breakdowns on the road is due to failure of the contact plow.'

This is undoubtedly true, but the defects reported by Mr. McLimont have no connection whatever with the conduit system and ought to be remedied regardless of what changes or improvements are adopted in the conduits and the method of transmitting current from the conductors to the motors.

"The failure of the company to provide adequate protection to the power cables under the platforms and floors of the cars and the defective condition of the automatic circuit breakers have increased the possibility of the car catching fire. The evidence does not show that the frequent disastrous fires in the carhouses of the company have been due to defective wiring of the circuit breakers and appliances but when the evidence clearly shows, as it does, that there is a lack of proper insulation and that there are defective circuit breakers on many cars, one is led to consider whether the great loss of equipment and of carhouses might not have been due to these defects.

"Frequent complaints have been made to the Commission of the noise caused by street cars. The evidence shows that a very large proportion of the cars are noisy and that if they were properly repaired, wearing parts promptly renewed and the running-gear kept well lubricated, the noise would be very greatly reduced. In my opinion, the public should be protected against unnecessary noise, and that, even if the defective condition of the cars did not interfere with the carrying capacity of the system, the Commission would be justified in requiring the company so to maintain its equipment as to reduce car noises to a minimum.

"For similar reasons, I have concluded that the company should be required to put its cars in a clean and neat condition. Dirty or filthy cars are not only offensive but are dangerous to the health of the city.

"In the order recommended for adoption, the date fixed when the company shall begin to turn out ten cars per day from the repair shops is February 15th. No representative of the company or of the receivers appeared at the hearing, so that it was impossible to obtain from them an opinion as to when the order should be made operative. However, Mr. McLimont definitely testified that knowing as he did the exact facilities which would be needed by the company to comply with the order and the facilities which they now have, it would be possible for the company to begin and continue turning out ten cars a day upon and after February 15th.

"In order to turn out ten cars a day, it will not be necessary to reduce materially the number of cars now being operated upon the lines of the company. Mr. McLimont testified that not more than forty cars would need to be kept out of service at any one time. Indeed, the number of cars which the company has ordered and of which delivery has been promised before February 15th is several times the number of cars which upon any one day will need to be taken from the service for repairs so as to comply with the proposed order.

"The order is made applicable to the entire rolling stock of the company, including the summer as well as the winter cars. Of course, the cars now in use are the cars that should be repaired immediately, but the order has been made applicable to the summer cars in order that by the time these cars are needed, they will have been repaired and put in good condition."

The receivers of the company did not appear at the hearings but filed a copy of an order of instructions to them by the court, which will be found set out in full above in the report on the Fourth avenue and Madison avenue lines. They also filed a letter which stated:

"* * * It is of course most desirable that every car should receive a thorough inspection followed by such repairing as will put it in first class condition. The condition of the rolling stock

when we took possession was deplorable. The main cause of this was apparently the neglect of the company in prior years to keep it at all times in first class condition. * * * "

The order adopted (No. 179) required that the cars of the New York City Railway Company or of said receivers receive a thorough inspection, covering car bodies, motor and electric equipment, wiring and trucks, and that said cars be thoroughly overhauled and repaired so that when completed they and each of them shall be in first class operating and substantially new condition, having safe, proper and adequate car bodies, headlights, pilot fenders, wiring, brasses, commutators, field coils and armature windings, trucks, brakes, controllers, automatic circuit breakers, resistances, axle gear wheels, armature pinions and car wheels; and also that on and after the 15th day of February, 1908, the said New York City Railway Company or its receivers, turn out not fewer than ten of said cars daily, not including Sundays and legal holidays, so overhauled and repaired as aforesaid; and further that said New York City Railway Company or its said receivers notify the Commission daily in writing, in a form to be prescribed by the Commission, of the number of said cars so turned out as aforesaid, giving the identification numbers thereof, and when and where the same are to be tested; and further that from and after the 15th day of February, 1908, the said New York City Railway Company or its said receivers furnish and forward daily a transcript of the daily entries in the so-called "run in" book or books, showing among other things which of said cars are out of order.

C. BRONX SURFACE LINES.

Equipment. An investigation similar to the one made by Mr. McLimont and his assistants in Manhattan was begun in December for the surface lines of the Bronx, but had not been completed at the close of the year. Early in January a hearing will probably be held upon the facts as reported.

Shelters. Lack of a waiting room for passengers coming from the subway station at One Hundred and Eighty-first street to take the surface cars of the New York City Interborough Railway

Company, thereby obliging passengers to stand on the street exposed to storms and weather, and unnecessary delays in the operation of cars from the terminal across Washington bridge have been the cause of much inconvenience to residents of this section of the city. Between the time when the order (No. 101) was passed and the date of the hearing, the complainant admitted that the delays caused by slow running and the stopping of cars on Washington bridge had practically ceased, and that conditions had improved. The need of a shelter, however, was emphasized. The company contended that to keep a car at the terminus of the line in One Hundred and Eighty-first street as a shelter for passengers in the intervals between cars would disarrange its service and inconvenience many of its patrons. The Commission decided that the company ought either to erect a shelter at the point complained of or to hold a car there for the use of waiting passengers until the arrival of the next or succeeding car, and issued an order to this effect (No. 183).

Kingsbridge line. Complaint was made to the Commission that the New York City Interborough Railway Company, which formerly operated a line between Kingsbridge road and the One Hundred and Fify-fifth street terminus of the Sixth and Ninth avenues elevated roads, had discontinued such service, running its lines to the One Hundred and Eighty-first street station of the subway instead, to the great inconvenience of residents of the territory north of Washington bridge and west of Jerome avenue. The railroad company admitted the discontinuance of the service to the One Hundred and Fifty-fifth street elevated terminus, but claimed that the present operation of all cars to the One Hundred and Eighty-first street subway station met the convenience of a larger portion of the traveling public than the service formerly rendered.

The evidence presented at the hearing (Order No. 158) did not bear out the contention of the company, and the Commission ordered the New York City Interborough Railway Company to run a line of cars through from Kingsbridge road, over its Aqueduct avenue line and over its Ogden avenue line in a continuous passage without change to the One Hundred and Fifty-fifth street terminus of the elevated roads connecting with the elevated cars at that

point and from said elevated station back over the same route, and prescribed the headway and intervals between cars in service to take effect not later than January 8, 1908 (see Order No. 176).

Williamsbridge cars. Complaint was made to the Commission that the Williamsbridge cars of the Union Railway Company stopped at Two Hundred and Thirty-third street, instead of running to the city line at Two Hundred and Forty-third street, to the great inconvenience of the public. The testimony taken at the hearing under Order No. 20, showed that the Williamsbridge cars had until within a short time been run to South street, Mount Vernon; that as so operated they were a great convenience to the public in that section; that there was no proper shelter station at the stopping place at Two Hundred and Thirty-third street, and that passengers from Williamsbridge cars were often exposed in inclement weather for a period of from five to twenty minutes and had to wait for a car from One Hundred and Twenty-eighth street to take them to their destination. The company was ordered (No. 45) to operate the Williamsbridge line to and from the city line at or near Two Hundred and Forty-second street, and the Westchester Electric Railroad Company was directed to permit this additional service, so far as the same is to be given on its tracks and under its franchise.

Union Railway Company — North and South Transfers on its Williamsbridge line. The Union Railway Company refused to give passengers on their Tremont and Burnside avenues lines a transfer which would entitle the passenger to go either north or south on Webster and Jerome avenues. The case was settled by an order (see Nos. 159 and 182) requiring said railroad company upon request to give any passenger on its Williamsbridge line westbound on Tremont avenue, west of Morris Park avenue, prior to his leaving the car at Third avenue and One Hundred and Seventy-seventh street, a transfer for continuance of his trip either north or south.

Transfers to Bedford Park and New Rochelle Express. A similar case came up in connection with the express or special cars run between Bedford park and New Rochelle. The companies refused to issue transfers to these cars, or to accept on these cars

transfers issued from other lines, and the cars did not make all regular stops. The Commission directed (see Orders Nos. 20 and 46) the Westchester Electric Railroad Company to issue to its passengers on the Bedford park and New Rochelle express cars transfer slips for a continuous trip on the cars of the Union Railway Company at One Hundred and Ninety-eighth street and at the terminus of Williamsbridge car lines on White Plains road; and the Union Railway Company to accept at such places transfer slips for such further transportation, and to issue to its passengers transfer slips for the express cars in a continuous trip; and the Westchester Electric Railroad Company to accept also transfer slips so issued by the Union Railway Company.

Union Railway Company's lines. Many complaints have been received regarding the service of the Union Railway Company, and one of the first orders (No. 18) was for a hearing to inquire whether it would be just and reasonable to direct the company to increase its service on all of its lines twenty-five per cent. over the then present schedule between the hours of 5 a. m. and 1 a. m., and 100 per cent. between the hours of 1 a. m. and 5 a. m.

At the hearing the inspectors of the Commission testified as to the service of the company at Tremont avenue and One Hundred and Seventy-seventh street, at One Hundred and Thirty-eighth street and Third avenue, on the crosstown line, running from Port Morris to Eighth avenue, and as to the lines and intersections of car lines generally. Testimony was also given as to the condition of the West Farms traffic, westbound, in the morning, and the traffic in the evening on the Tremont avenue line, said to be the most congested line in The Bronx; and it was shown that there were plenty of empty cars owned by the company not in service when the most overcrowding was noticed.

The inspectors testified particularly as to the condition of the cars observed by them, and introduced tabulations as to the degree of overcrowding. For example, on one car, with seating capacity of twenty-two, forty-five passengers were counted; on a car with a seating capacity of thirty-six, sixty-five passengers were counted; on one with seating capacity of thirty-six, eighty passengers were counted; on another with seating capacity of sixty-five, one hundred and five passengers were counted. This last was a large

open car, in which all the seats were taken, aisles crowded between seats, passengers on the front and rear bumpers and on the running board.

The order (No. 107) recommended by the presiding commissioner and adopted by the Commission directed that the service of the Union Railway Company be supplemented and changed as follows:

(1) By running south on the Jerome avenue line on its prescribed route between One Hundred and Fifty-fifth street viaduct via McComb's Dam bridge, Jerome avenue, Central avenue and Yonkers between 6:30 and 9:00 o'clock in the morning, sixty (60) cars.

(2) By running north on the said Jerome avenue line on the route aforesaid between 4:00 o'clock and 6:00 o'clock in the afternoon, fifty-two (52) cars.

(3) By running on the Mount Vernon line on the prescribed route between One Hundred Ninety-eighth street, by way of Webster avenue, Olin avenue, White Plains road and Mount Vernon, south bound, between 6:30 o'clock and 9:00 o'clock in the morning, forty-three (43) cars.

(4) By running north bound on the said Mount Vernon line, on the route aforesaid, between 6:30 o'clock and 9:00 o'clock in the morning, forty-three (43) cars.

(5) By running on the West Mount Vernon line, on the route prescribed between One Hundred and Ninety-eighth street, by way of Webster avenue, Bronx River road and West Mount Vernon, south road, between 6:30 o'clock and 9:00 o'clock in the morning, twenty (20) cars.

(6) By running north on the said West Mount Vernon line, on the route aforesaid, between 4:40 o'clock and 7 o'clock in the afternoon, twenty (20) cars.

(7) By running on the One Hundred and Thirty-eighth street line, on the route prescribed, between One Hundred and Thirty-fifth street and Eighth avenue, by way of One Hundred and Thirty-fifth street, One Hundred and Thirty-eighth street and Port Morris, between 6:30 o'clock and 9:00 o'clock in the morning, and between 5:00 o'clock and 6:30 o'clock in the afternoon,

at least thirty (30) cars in each hour thereof, and at the same rate for each fraction of an hour, and upon an even maintained headway or interval of two minutes between such cars.

(8) By running on the said One Hundred and Thirty-eighth street line, on the route aforesaid, between 9:00 o'clock in the morning and 5:00 o'clock in the afternoon, eighteen (18) cars in each hour thereof, and at the same rate for such fraction of an hour, upon an even maintained headway of three minutes and twenty seconds between such cars.

(9) By running between 5:00 o'clock in the morning and 8:00 o'clock in the evening one half of all cars on the Boston avenue or West Farms line, on the route prescribed between One Hundred and Twenty-eighth street by Third avenue, Boston road and West Farms, beyond West Farms, through Morris Park avenue, to the Morris Park race course, upon a headway or interval between said cars from said race course terminal of eight minutes between 5:00 o'clock in the forenoon and 4:30 o'clock in the afternoon, and of six minutes between 3:30 o'clock and 6:30 o'clock in the afternoon.

Discrimination in fares.— Complaint was made to the Commission of an illegal charge and discrimination by the New York City Interborough Railway Company, the Union Railway Company and the Interborough Rapid Transit Company, in that a person taking a subway train at One Hundred and Tenth street, west side, could go to One Hundred and Eighty-first street, there transfer to the New York City Interborough, ride to Aqueduct avenue, thence transfer to the Union Railway line and be carried to Westchester for eight cents, but the same person returning over the same route had to pay ten cents.

At the hearing (Orders Nos. 57 and 58) there was no dispute as to the facts, but it was contended by the representatives of the companies that while there were agreements between the New York City Interborough and the Interborough Rapid Transit Company requiring the New York City Interborough to honor the coupon ticket issued from the subway, and an agreement between the New York City Interborough and the Union Railway Company as to general transferring, there was no agreement or contract requiring or permitting the New York City Interborough to

issue transfers to the subway nor requiring the Interborough Rapid Transit Company to honor such transfer if given. The testimony of the witnesses for the corporations was all to the effect that in accepting transfers issued by the New York City Interborough to a passenger coming to it by a coupon from the subway, the Union Railway Company received nothing for transporting such passenger, and that the transportation of passengers for eight cents under any arrangement over these three roads was and must be at a loss to the corporations.

The presiding Commissioner found that the complainant was aggrieved by the fact that in traveling from his home to Westchester by the line of the Interborough Rapid Transit Company (the subway) from One Hundred and Tenth street to One Hundred and Eighty-first street, thence by the said New York City Interborough Railway Company to Aqueduct avenue, thence by said Union Railway Company of New York city to Westchester, he was carried by the defendant companies for the sum of eight cents, represented by the Interborough Rapid Transit Company's eight cents special coupon ticket, and a transfer slip from the New York City Interborough Railway Company to said Union Railway Company of New York city; whereas, on the return trip from Westchester to the same point at One Hundred and Tenth street and Broadway, over the same routes and lines operated by the defendants subject to the obligations aforesaid, he was required to pay ten cents, namely, a fare of five cents to the said Union Railway Company of New York city for carriage over the Union Railway Company, and by transfer over the New York City Interborough Railway Company, and a further sum of five cents to the Interborough Rapid Transit Company (the subway), and he was refused by the New York City Interborough Railway Company a coupon ticket for three cents offered by him as a passenger on its cars under transfer slip from the Union Railway Company of New York city, to which he had as aforesaid paid five cents for his fare.

It also appeared that under the obligations of the New York City Interborough Railway Company and the Union Railway Company of New York city, as street surface railroads, and under their agreement and under the terms of the contract between the

Interborough Rapid Transit Company and New York City Interborough Railway Company, applicable to extensions and acquisitions of the latter, the regulations and practices of the defendants as affecting rates charged for transportation of passengers as aforesaid in charging ten cents from Westchester to One Hundred and Tenth street, Manhattan, and eight cents from One Hundred and Tenth street, Manhattan, to Westchester, over the same route, were unjust, unreasonable, unjustly discriminatory and unduly preferential and in violation of law.

The order (No. 146) duly passed was, first, that the maximum rate to be charged by the Union Railway Company of New York city, New York City Interborough Railway Company and Interborough Rapid Transit Company for service to be performed by them in the carrying of each passenger from Westchester over the route of the Union Railway Company of New York city to Aqueduct avenue, thence over the route of the New York City Interborough Railway Company to One Hundred and Eighty-first street on St. Nicholas avenue, and thence over the route of the Interborough Rapid Transit Company to One Hundred and Tenth street, Manhattan, be the sum of eight cents; second, that this order shall take effect on the 15th day of December, 1907, and shall continue in force from and after said date so long as the charge of eight cents (.08) is made and required of each passenger by the said defendants for service performed by them in carrying such passenger from One Hundred and Tenth street, Manhattan, over the route of the said Interborough Rapid Transit Company to One Hundred and Eighty-first street on St. Nicholas avenue, thence over the route of the New York City Interborough Railway Company to Aqueduct avenue, and thence over the route of the Union Railway Company of New York city to Westchester.

The order was duly served upon the corporations affected by it, and an acknowledgment of such service received, with the statement in substance that on the 14th day of December the New York City Interborough Railroad Company discontinued the practice of issuing transfers to the Union Railway Company to persons presenting coupons of eight-cent subway tickets, that the fare now each way would be ten cents, that this would remove all discrimination, and that consequently the order of the Commission would have no effect.

D. BROOKLYN AND QUEENS SURFACE LINES.

Coney Island and Brooklyn Railroad Company. The first final order issued by the Commission related to this company. The complaint had been filed with the Railroad Commissioners early in 1907 by the South Brooklyn Board of Trade and others. It was claimed that the equipment of the company was inferior and defective; that its cars were old, with many flat wheels, improper fittings and generally dirty and unsanitary. The answer of the company was not satisfactory to the Railroad Commission nor convincing to the complainants, and a public hearing was announced for April, 1907. But no conclusion was reached and no final action taken by the Railroad Commissioners prior to July 1st, when the matter was transferred to this Commission and the complaints renewed before it.

In the investigation of the Brooklyn bridge situation, it was found that much of the delay on the bridge was caused by defects in the equipment of cars operated by the Coney Island and Brooklyn Railroad Company, and a conference was had between one of the Commissioners and the officers of the road looking to the improvement of these conditions. An engineer was directed to investigate, and he reported irregularity in service, delays to surface cars because of defective equipment, and that such delays were much worse in proportion than the delays caused by cars of other companies. In consequence, an order for a hearing was issued (No. 19) to determine whether the company should be required to provide ten new combination cars, fifty new 50 H. P. equipment for its cars and equip its cars with 275 new circuit breakers, and to provide new gear pans, two good and sufficient headlights for every car and to place car numbers conspicuously in the middle of the outside platform of closed cars.

The presiding Commissioner's report was as follows: "A general inquiry having been had regarding the Coney Island and Brooklyn Railroad Company * * * it was shown by the testimony that said corporation acceded to the issue of an order on all of the points enumerated in the order issued for the hearing excepting the fifty new 50 H. P. equipments. The reason given for the opposition to this item is that these new equipments are not needed and their purchase would impose too large a financial

burden. The basis, however, of this item was a statement by Superintendent Sullivan of this corporation at a former conference that these equipments were desirable; that statement, however, made as it was without prejudice, might properly be withdrawn by the corporation. The hearing was adjourned until September 11, 1907, for further instructions from this Commission. As the need of these equipments affects the general operating ability of the entire line and as other shortcomings may well be considered in a general inquiry, it seems it would be best to postpone the consideration of the forty equipments and bring the hearing to a close on September 11th. It will probably not be best, however, to drop further consideration of this company and I recommend that a hearing be given on September 25, 1907, at 2:30 p. m., at which time all parties desiring to present complaints against any of the lines of this street railroad corporation could do so. It would then be possible for a committee of this Commission to consider all of the complaints that have come in against this company, including the complaints pending before the State Railroad Commission and transmitted to us and the matters brought out at such hearing. If the shortcomings of this road appear sufficiently important to warrant it, a thorough inquiry can be instituted, as a result of which orders to show cause touching various defects can be made. I recommend this procedure."

In accordance therewith an order (No. 21) was issued requiring that the company provide ten new combination cars each with 50 H. P. equipment for use on its Smith street line, on or before January 1, 1908; equip its cars in service with improved circuit breakers; provide and equip its cars in service with efficient gear pans; provide and maintain for each of its cars in service, two good and sufficient headlights; and maintain car numbers conspicuously in the middle of the platform of each car in service; and that the matter of providing for the remaining forty of the 50 H. P. equipments specified in the order for the hearing should be dismissed without prejudice.

At the request of the company, this order was re-opened as to the first item. The company's expert and the Commission's expert agreed that a new type of car was desirable and that a request for additional time to provide such cars was reasonable.

An order (No. 60) was duly issued directing that on or before February 1, 1908, the Coney Island and Brooklyn Railroad Company provide ten new car bodies each with as great seating capacity as any then operated by that company, each with new double 50 H. P. equipments complete and each with new trucks.

Further complaint being made as to the service of the company, an order for a hearing (No. 32) was issued to determine whether to require increased service and improvement in equipment as follows:

(1) To increase the present service on the Smith street line so that twenty-five per cent. of all cars now running to Park Circle shall continue beyond that point to Coney Island and an additional twenty-five per cent. of all cars on said line now running to Park Circle shall continue from Park Circle to Kings Highway.

(2) To require that a shelter for the protection of passengers in waiting for transportation shall be provided and maintained by the said company at Park Circle.

Hearings were had at which it was testified that the cars of the company at the Park Circle were almost always crowded and that sometimes a wait of fifteen minutes was necessary to get a car going beyond this point, and during this time passengers were compelled to stand in the street without any shelter. There was also much complaint as to defective equipment in these cars and unnecessary noises made by them. At the request of the company, which asserted that it desired to make whatever increase of service was required to accommodate properly its passenger traffic beyond Park Circle, the hearing was adjourned and the matter held open. Subsequently the Commissioner in charge recommended the following resolution which was adopted by the Commission (see Order No. 161):

"Whereas, This Commission made an order on the 9th day of October, 1907, for a hearing upon the service of the Coney Island and Brooklyn Railroad Company, in the matter of an increase of service between Park Circle and Coney Island, which was Order No. 32 of this Commission; and

"Whereas, Hearings have been held under said order; and

"Whereas, It appears that on or about the 9th day of October, 1907, the said railroad company increased its service on said line

to such an extent that cars were operated on the following schedule, to-wit:

* * * * * * * *

[Here follows a detailed statement of the new schedule.]

* * * * * * * *

"And Whereas, It appears that the service as thus increased furnishes reasonably adequate accommodation for the passengers offering themselves for transportation between Park Circle and Coney Island on the lines indicated.

"Therefore, be it Resolved, That for the present no further action be taken on the matter of an increase in the number of cars operated over the line of said company between Park Circle and Coney Island, in the borough of Brooklyn.

"And be it Further Resolved, That this action of the Commission shall be without prejudice to the issuance of further orders for the increase of service on said line, as occasion may require."

Because of the many complaints received as to the defective equipment of this company's cars and the frequent delays on the Brooklyn Bridge because of breakages especially of its open cars, an order for a hearing on this particular matter (No. 88) was issued to determine whether to require the company to pass its open car bodies, trucks and equipment through the shops making necessary repairs and turning them out in as perfect condition as possible before the summer of 1908, and further, to provide and equip each of the cars with two new automatic circuit breakers of sufficient capacity and modern type, and provide and equip each car with a gear case for each motor. After hearing a final order (No. 134) was issued requiring compliance by the 15th day of April, 1908.

A rehearing was ordered at the request of the company, reopening the matter of paragraph 2 which reads:

"That said company by or before the said 15th day of April, 1908, provide and equip all of said open cars with two new automatic circuit breakers, of sufficient capacity and modern type."

As to this item the company maintains that one circuit breaker on each car of sufficient capacity and modern type is all that is necessary. The case had not been disposed of at the close of the year and is pending.

Another proceeding was started by Order No. 104 resulting in a final order (No. 164) requiring repairs to axle gears and armature pins; that all flat wheels be immediately replaced; that all car interiors be varnished and cleaned and kept in cleanly and sanitary condition; that carpets be removed from all seat backs and seats, and the same covered with rattan; that all brake mechanism of the cars be inspected and adjusted at frequent intervals, and maintained in thorough and efficient operating condition.

Service to Cypress Hills and to Jamaica. The complainants of inadequate service on the Lexington avenue line of the Brooklyn Union Elevated Railroad Company to Cypress Hills, and of the connection there with surface cars to points to and beyond Jamaica, demanded that the Gates avenue short line trains be run through to Van Siclen avenue and Fulton street station; that the trains stopping at the Van Siclen avenue station be run through to the terminus of Crescent street and Jamaica avenue; that surface cars on the Myrtle avenue line stopping at Richmond Hill be run through to Jamaica, and that the service be otherwise increased and improved.

It appeared from the testimony taken under Order No. 38 that the service rendered by the companies was inadequate and might reasonably be increased. A final order (No. 99) therefore was issued by the Commission providing:

That the service of the Brooklyn Union Elevated Railroad Company, on its lines on Lexington avenue, Broadway, Fulton street and Crescent street, be supplemented and changed as follows:

(1) That the said Brooklyn Union Elevated Railroad Company operate the short line trains of its Lexington avenue line, which have heretofore terminated their eastward run at Gates avenue, through to Manhattan Junction, during the evening rush hours, and that the said company make each of such trains during said rush hours a train of at least six (6) cars,

(2) That the said company operate all trains on its Broadway line, which have heretofore terminated their eastward run at Van Siclen avenue, through to Cypress Hills station at all times, and that during the rush hours, both morning and evening, the said company make each of said trains a train of at least five (5) cars.

(3) That the said company operate its Lexington avenue trains to and from Cypress Hills station with a headway of not more than seven and one-half (7½) minutes between said trains, during the period between the morning and the evening rush hours, and during the period after the evening rush hours until twelve o'clock midnight, and that during those periods the said company make each of said trains a train of not less than four (4) cars;

And it was further ordered: That the Brooklyn Heights Railroad Company supplement and change its service on its Jamaica avenue line between the Cypress Hills station and Jamaica, as follows:

(1) That the said company increase its service on its Jamaica avenue line so that at least twenty per cent. (20%) more cars shall operate between Cypress Hills station and Jamaica than were provided in the schedule in effect on said line on the 11th day of October, 1907.

(2) That in addition to the said increase the said company run an additional car out from Jamaica to Cypress Hills at 4:45 a. m., so that cars shall leave Jamaica with a headway of not more than fifteen (15) minutes between cars during the period between 4:30 a. m. and 5:00 a. m. inclusive.

At the request of the Brooklyn Union Elevated Railroad Company a rehearing was had as to that part of the third paragraph of the order which required its trains to be of not less than four cars each, and Order No. 165 was issued on the report and recommendation of the Commissioner presiding changing the period during which four car trains are required to be operated.

Improvements on Ridgewood Lutheran Cemetery Line. Complaints were made to the Commission in regard to the unsafety of gates, platforms and switches of the Ridgewood Lutheran Cemetery line of the Brooklyn Union Elevated Railroad Company at or

in the vicinity of grade crossings and stations, and the necessity for improvement in these particulars was indicated by reports of the Commission's inspectors. An order for a hearing (No. 87) was issued followed by a final order (No. 153) directing improvements and changes as follows:

"First. That the said Brooklyn Union Elevated Railroad Company complete the gates now in course of construction at the crossing of its Lutheran Cemetery line at Fresh Pond road, and put said gates in actual operation in perfect running order on or before the 10th day of February, 1908.

"Second. That the said Brooklyn Union Elevated Railroad Company construct gates at the Forest avenue crossing on said Lutheran Cemetery line, and put the same in actual operation in perfect running order on or before the 10th day of December, 1908, and that pending the operation of said gates at said Forest avenue crossing, said company maintain a flagman at said Forest avenue crossing.

"Third. That the said Brooklyn Union Elevated Railroad Company put all the gates on said Lutheran Cemetery line in perfect running order on or before the 10th day of February, 1908; and from and after the date of this order said company maintain lights at night upon all gates at crossings on said Lutheran Cemetery line.

"Fourth. That the said Brooklyn Union Elevated Railroad Company construct a suitable wooden platform at its station on the easterly side of Palmetto street near Covert avenue, on or before the 10th day of January, 1908."

On application of the railroad company, a re-hearing was ordered in respect to paragraph four of said order and upon recommendation of the Commissioner presiding at the hearings, it was modified and amended to read as follows:

"Fourth. That the said Brooklyn Union Elevated Railroad Company place its present platforms at the Covert avenue station of its Lutheran Cemetery line, in good condition on or before the 10th day of January, 1908, and that on or before the first day of May, 1908, said company construct at this point, a new platform or platforms of wood or cement of suitable and safe design." (See Order No. 172.)

Ash Cars on Surface Lines. Upon complaint that the Brooklyn Rapid Transit Company controlling the American Railway Traffic Company, which latter had a contract with the city of New York for the removal of ashes in Brooklyn, was interfering with regular passenger traffic on the roads in its system by operating ash cars in the day time, a hearing was ordered (Nos. 11 and 16) to inquire whether it would be proper to order operation of such cars to cease between 6 a. m. and 8 p. m. After the hearings pursuant to the order, the Commissioner presented the following report:

"Your Committee understands that the contract between the Brooklyn Rapid Transit Company and the city for this service was not the subject referred to it, but merely the question of transportation of ashes. The merits of the contract, itself, therefore, were not formally, though they were incidentally, considered by your Committee.

"Two hearings were given, the first one being adjourned after notice of appearances at the request of the counsel of the company so that the city might be made a party and heard. At the second hearing the testimony and particularly that of Commissioner Bensel, of the Street Cleaning Department, and President Winter, disclosed that the city had repeatedly modified the terms of the contract regarding the transportation of the ashes and assented to the same being done in the day time. Indeed, the contract specified that the work is to be carried on subject to the approval of the city in general.

"It was also disclosed that the Street Cleaning Department was unable to deliver the ashes to the Railway Company at such stated times and in such ways as would enable it to transport the same exclusively in the day time. Indeed, it seemed to be established that for the railroad company to hold the gatherings by the Street Cleaning Department at its various stations through the day time, so as to accumulate for transportation by night only, might be physically impossible (certainly so with the present equipment) and would create conditions prejudicial to health. At the present time about one-third of the work is done at night, and it was testified that there was more complaint on the part of the public because of the night work than because of the transportation by day. From a consideration of the testimony and the statements

made by Commissioner Bensel, your Committee is of the opinion that no action should be taken by the Commission in this matter and would recommend that the order submitted herewith be adopted."

The order (No. 71) was thereupon adopted to the effect that the proceedings be dismissed without prejudice to further action by the Commission at any time when deemed proper and advisable.

Service between East New York and Long Island City. Complaint was made to the Commission that the service of the Long Island Railroad Company between East New York and Long Island City was inadequate to properly care for passenger traffic. It was urged that the rapid transit service as operated by the company prior to 1903 should be resumed. At the hearing (see Order No. 100) it was shown that the residents of a considerable section would be very much convenienced by the proposal, and in the opinion of the witnesses in support of the complaint such trains would pay the company. It was admitted by the company that the trains as desired were run prior to, and discontinued in, 1902, but contended that they would run at a loss to the railroad, and that the resumption of such service would mean increased loss to the railroad, because of the increased cost of operating.

Upon the report and recommendation of the Commissioner in charge an order (No. 181) was issued requiring the railroad company to increase the service by running two trains from East New York to Long Island City between 6:10 a. m. and 7:30 a. m., and by running a train from Long Island City to East New York between 5:50 p. m. and 6:10 p. m., such trains to be in addition to the service operated at the date of the order and such increased service to begin not later than January 13, 1908, and to continue until such date as the company inaugurates its summer schedule.

Livingston street extension. One of the first orders (No. 9) of the Commission granted to the Nassau Electric Railroad the right to construct its Livingston street extension, which is now in operation and materially relieves the congestion in the down-town sec-

E. BROOKLYN AND QUEENS ELEVATED ROADS.

The first complaints received were regarding the following:

(1) That service on Sundays and holidays throughout the entire system of the company was inadequate.

(2) That platforms of the company were not sufficiently long, and should be lengthened to accommodate eight car trains.

(3) That the service from Broadway ferries to Cypress Hills was inadequate, and should be increased by running through trains between the points mentioned.

(4) That exits at Gates avenue and Halsey street stations were inadequate.

(5) That the reconstruction of the Broadway elevated had cut down and was cutting down further the head-room in the roadway.

(6) That the Marcy avenue and Driggs avenue stations were not guarded by station men.

(7) That the service on the Lexington avenue line was inadequate, and should be increased by running Lexington avenue trains during rush hours, through to Manhattan Junction.

(8) That the service in rush hours was inadequate and should be increased by making all rush hour trains, trains of six cars.

(9) That the arrangement of the Cypress Hills terminal was improper and should be changed so that trolley cars and elevated cars might be on the same level at that point.

(10) That the service after rush hours on the Lexington avenue line was inadequate and should be increased by running cars at more frequent intervals.

(11) That the practice of the company in regard to time tables was improper and should be changed by displaying time tables at the Manhattan end of the Brooklyn Bridge.

(12) That the stations at Tillary street and Lafayette avenue were improperly maintained and should be reopened or removed.

(13) That the service at Fulton street and Flatbush avenue was improper and should be changed by making arrangements for transfers between the Fifth avenue elevated and the Fulton street elevated lines.

(14) That proper notice of stations was not given to pas-

sengers and that the service in this particular should be changed by placing destination signs on cars.

(15) That the south platform, parallel to the iron platform at the Manhattan terminal of the Brooklyn Bridge, was improperly put out of use and should be used during rush hours.

(16) That the service between the end of the rush hours and 7:00 p. m. was inadequate and should be increased by maintaining rush hour headway until 7:00 p. m.

(17) That the service of the company on the north side platforms of the Manhattan terminal of the Brooklyn Bridge was inadequate and should be increased by the opening at all times of side doors of trains being unloaded.

(18) That bridge cars were not properly ventilated.

(19) That the service on the Broadway elevated line was inadequate and should be increased by the operation of more cars.

Items Nos. 3, 7 and 9 relate to matters considered in another proceeding (service to Cypress Hills station and to Jamaica) as already set forth. By two orders (Nos. 34 and 35) copies of the other complaints were served on the company, which was thereby required to satisfy or answer within ten days. The company in its answer expressed compliance with items Nos. 1, 2, 7, 8, 17 and 19. The complaints and answers were carefully considered, and it became apparent that public hearings should be had in relation to several of the items. A hearing order (No. 89) was adopted therefore.

At the hearing it was made plain that the station signs provided by the company were not sufficient; that considerable congestion existed during rush hours at the stations of the company, corner of Broadway and Halsey street, and corner of Broadway and Gates avenue; that the head-room in the roadway under the elevated structure on Broadway had been decreased and was being decreased further by the re-enforcement of the elevated structure; that the station at Fulton and Tillary streets was being used only for storage purposes and was unsightly; that the station and stairways on the Fulton street line at Lafayette avenue were intended for use in the future but were out of repair.

As to some of the matters not directly covered in the proceedings, the complainant and the company arrived at an agreement

regarding improvements to be made, such as the matter of arranging signs on station platforms, and a final order was adopted (No. 156) requiring:

"(1) That the said Brooklyn Union Elevated Railroad Company procure one hundred and forty-three (143) additional station signs of a size and pattern similar to the signs now generally in use upon the lines of the said company, and place said signs at their stations at the following named points by or before the 10th day of February, 1908.

"On the Fulton street line, one additional sign at the Court street station; two additional signs each at the Flatbush avenue, Manhattan Junction, Atlantic avenue, Eastern Parkway, Pennsylvania avenue and Grant avenue stations; and four additional signs at the Franklin avenue station.

"On the Myrtle avenue line, six additional signs at the Bridge street station, and two additional signs each at the Vanderbilt avenue, Washington avenue, Franklin avenue, Nostrand avenue, Tompkins avenue, Sumner avenue, Evergreen avenue and Knickerbocker avenue stations.

"On the Broadway line, two additional signs each at the Myrtle avenue, Gates avenue and Halsey street stations; three additional signs at the Manhattan Crossing station; and four additional signs at the Broadway Ferry and Cypress Hills stations.

"On the Fifth avenue line, four additional signs each at the Thirty-sixth street and Sixty-fifth street stations.

"On the Brighton Beach line, two additional signs at Consumers' Park station; four additional signs each at Dean street, Park place, Prospect Park, Woodruff avenue, Church avenue, Beverly road, Avenue C, Avenue J, Avenue U, Avenue M and Neck Road station; and eight additional signs each at the Newkirk avenue, Kings Highway and Sheepshead Bay stations.

"On the Culver line, one additional sign at the Parkville station.

"On the Sea Beach line two additional signs each at the Bath Junction and Twenty-second avenue stations.

"On the West End line, one additional sign at the Bath Beach station, and three additional signs at the Ulmer Park station.

" Each of said signs to be placed wherever practicable, at the top of the platform railing, and in all cases to be placed as conspicuously as possible and to be maintained in such way that advertising signs, vending machines and other obstructions shall not interfere with a view of the signs.

" (2) That said company construct an additional stairway from the gallery landing to the northerly side of Broadway at the Gates avenue station and widen the stairway now leading from the gallery to the station platforms as much as the side stringers will allow; this work to be completed by or before April 10, 1908.

" (3) That said company construct an additional stairway from the gallery landing to the northerly side of Broadway at the Halsey street station and widen the stairway leading from the gallery to the station platforms as much as the side stringers will allow; this work to be completed before April 10, 1908.

" (4) That hereafter said company shall remove all unnecessary parts of the elevated structure of said company on Broadway, in the borough of Brooklyn, when the new girders are inserted.

" (5) That said company remove the platform and station, including stairways, from the structure of said company at the intersection of Fulton and Tillary streets, in the borough of Brooklyn, by or before March 2, 1908.

" (6) That the said company repair the station and stairways on the Fulton street line of said company at Lafayette avenue by or before February 10, 1908, and thereafter keep the same in first class order, whether used or not."

Shelter at Fifth Avenue and Thirty-sixth Street.— Complaint being made of the inadequacy of the waiting room accommodations and shelter of the Brooklyn Union Elevated Railroad Company at Fifth avenue and Thirty-sixth street, it was referred to the railroad company (Order No. 95). The answer not being satisfactory to the Commission, Order No. 147 was issued for a hearing. It appeared from the testimony that the Thirty-sixth street station of this company is on a high point of ground where the winds which sweep across New York bay drive upon any waiting passenger, and that the waiting room provided at the northerly end of the station is not cared for in such way that the women passengers avail them-

selves of it. The station was examined by an inspector employed by the Commission and he reported that it was feasible to erect wind breaks or partitions on the platform which would be a protection to the passengers awaiting transit. Doubt as to this was expressed by the officials of the road because of the effect of such winds breaks in impeding the movement of passengers from one train to another, it being a transfer station.

Upon recommendation an order (No. 173) was issued by the Commission providing as follows:

"(1) That said Brooklyn Union Elevated Railroad Company construct and maintain proper partitions to break the force of the wind on the westerly platform of the Thirty-sixth street station on the Fifth avenue line of said company, the same to be completed on or before the 25th day of January, 1908.

"(2) That said company reconstruct the waiting room at the northerly end of the westerly platform of said Thirty-sixth street station, making the same neat and accessible, with the interior light and properly ventilated; and that said company shall maintain the same as a first class passenger waiting room, and shall keep the same properly heated in cold weather. These changes and improvements shall be completed on or before the 25th day of January, 1908.

"(3) That said company immediately renovate and properly repair and refit the waiting room on the southerly end of the easterly platform of said Thirty-sixth street station, and that said company shall maintain the same as a first class passenger waiting room."

Terminal Facilities at Cypress Hills Station.— Complaint was also made to the Commission as to the inadequacy of the terminal facilities of the Cypress Hills station, at Crescent street and Jamaica avenue, and it was suggested that an additional stairway or stairways were required to accommodate properly traffic at that point. At the hearing (Order No. 66), a desire was evidenced on the part of the railroad company to meet the wishes of the complainants and of the Commission, by making adequate improvements at the Cypress Hills station, but there is some difference of opinion as to what improvements would be best.

At the suggestion of the presiding Commissioner the matter was referred to Mr. Turner, chief inspector of stations of the Commission, and to the representatives of the company, and the complainants to inspect thoroughly the whole situation as to switches, stairways and platforms, and to agree if possible upon what was desirable to be done in improving the Cypress Hills station. A decision had not been reached at the close of the year.

F. THE BROOKLYN BRIDGE.

General Conditions.— One of the first matters to receive the special attention of the Commission was the congestion in passenger traffic, morning and evening, on the Brooklyn bridge. A committee was appointed on July 8th to personally investigate and report. Public hearings were held at which the matter was discussed and many means of relief suggested, and the actual operation of cars using the bridge was put under the continuous daily observation of trained inspectors in the employ of the Commission.

The Commission has had the cordial co-operation of the city officials of the Bridge Department in its endeavor to improve this service and altogether considerable has been accomplished. It should be remembered that the jurisdiction of this Commission extends to the service by the operating companies over it only, and not to the structure of the bridge itself, as the city charter gives that responsibility to the Department of Bridges.

Regardless of the numbers of persons using the bridge, what they and the public generally demand is relief from the present crush and distressing conditions, but in order to appreciate intelligently the difficulties of dealing with the present condition, the tremendous traffic over the bridge should be known. Actual count made under the direction of officials of the Bridge Department, on October 17th, 1907, shows that on that day 426,364 persons used this bridge, going from Manhattan to Brooklyn or from Brooklyn to Manhattan, a number exceeding by several thousand the entire population of Buffalo, the second city in population in the State, and more than the entire population of the State of Rhode Island; that it required the operation of 15,263 cars, composing 1,302 elevated trains and 600 bridge trains, to transfer

such passengers; that in the heaviest hour of travel 54,726 persons crossed this bridge in one direction, and that this is but an average bridge day's traffic.

Breakdowns.— The daily reports of the inspector disclosed the fact that much of the delay of cars on the bridge resulted from imperfect equipment of some of the surface cars, causing breakdowns. This was found to be particularly true of the cars of the Smith street line owned by the Coney Island and Brooklyn Railroad Company. The matter was brought to the attention of the operating company, hearings were had and testimony taken resulting in orders being made by the Commission to increase and perfect the equipment by the purchase of new cars, by supplying new and repairing defective equipment, and by requiring every car to go through the shop for thorough overhauling at the earliest possible day. (The details of this case are given on page 99.) The investigation also disclosed that during the rush hours the surface cars using the bridge were much impeded by overloaded trucks and other vehicles becoming stalled and breaking down in the roadway. It was found that delays thus caused aggregated many hours per month, and at the suggestion of its committee, the Commission recommended that the Department of Bridges adopt a rule to prohibit any heavily loaded wagons crossing the bridge during the rush hours, 7 a. m. to 9 a. m., and 5 p. m. to 7 p. m. This rule has been adopted and is being enforced. These various improvements have brought about the result that 12 per cent. more surface cars cross the bridge than ever before.

Some of the causes of delays to surface cars were found to be: Blowing out of fuses, breakdown of motors, derailment at loops, irregular methods of stopping on loops, improper discharge of passengers, failure of trolley wire to follow the curvature of the track at the loops, failure to properly sand the tracks during wet and foggy weather, and failure to have conspicuous destination signs on the cars. Causes of delays to trains were: Derailments, overloading of island platform preventing closing of gates, failure to open side doors, pulling out of draw bars due to neglect of equipment, insufficient motor power, and lack of superintendence of passengers. These are all little things, but when the bridge is

being used by 50,000 persons an hour, a delay of one second in its regular operation is equivalent in the aggregate to the loss of one and one-half business days for one person, and discomfort and inconvenience to thousands. A proper and intelligent superintendence and inspection by the corporations interested would have discovered and remedied these causes of delay, as it would also those caused by defective car equipment. It should be said that the shuttle train cars are owned by the city and their use will soon be discontinued.

Increased and intelligent police regulation and changes in the arrangements of platforms for loading and unloading during the rush hours have been suggested and the suggestion cordially accepted and acted on, all of which tend to increase the carrying capacity of the bridge and improve its traffic condition.

Traffic Congestion.— Nevertheless, the congestion in the hours of heaviest traffic is extreme and almost unendurable. This regrettable condition is the growth of many years. Since the opening of the Brooklyn bridge twenty-five years ago, it has been almost the only communication between two great cities. During that time the population dependent on this bridge has quadrupled. Device after device for increasing the capacity has been adopted as additional thousands of passengers have arrived. For the past eight years the bridge has been over-taxed. More people have sought passage than the bridge could properly carry on cars and trains. The city authorities have been unable to plan or construct sufficient bridges and tunnels, and those which they did prepare, such as the Manhattan bridge and the Battery tunnel, have been delayed years beyond their expected completion. The only relief for the Brooklyn bridge is to lessen the number of people that must use it, and it cannot be expected that in a single year complete relief can be accomplished. For a long time each improvement that affords the slightest alleviation to the Brooklyn bridge crush will be a signal for new people to try to cross it in the rush hours. To-day thousands go home before or after the evening rush hour to avoid the crowding, and many of these passengers will alter the time of their home going so that the crowd at certain times will continue to tax the capacity of the bridge.

The City's Plan.—Many of the plans presented for solving the problem of the Brooklyn bridge crush presuppose that the city is following no plan of its own. The fact is, however, that for the last year and a half the city has been following a definite policy as to the future of the Brooklyn bridge. No results of this policy have yet been put in operation, but in order to make plain the difference between the past lack of policy and the present definiteness of the city's plans, it will be well to state the method of operation that has obtained during the past year and what will go into operation in 1908 and thereafter. At present during the rush hours shuttle cars operate from one bridge terminal to the other. Passengers using Brooklyn elevated roads and the bridge pay five cents and those using the bridge only pay three cents. All through passengers are compelled to change cars at the Brooklyn terminal of the bridge. All surface cars charge five cents for a ride across the bridge.

The new plan on which the city authorities are now working is entirely different. The aim is to do away with the change of cars at the Brooklyn terminal both morning and evening. The first requirement in the accomplishment of this object is to cause the passengers paying a three-cent fare to use the surface cars instead of the elevated trains. To accomplish this a loop is now under construction at the Brooklyn terminal of the bridge. When this is completed a line of surface cars will pass back and forth from one bridge terminal to the other carrying passengers for the three-cent fare.

The removal of these passengers from the elevated trains will allow the discontinuance of the Brooklyn end of the bridge as an elevated terminal, and trains will proceed through this station without stopping. The bridge shuttle cars will be discontinued, and all elevated trains across the bridge will be through trains. As only five-car elevated trains can be introduced through the Manhattan terminal as now arranged, the Bridge Department has extended the Manhattan terminal west to the edge of City Hall park in order that six-car trains may be used. This extension, however, is only temporary, for when the station on the site of the Staats Zeitung building is completed, many of the bridge trains will run into it, and at that time the extension of the bridge

across Park Row can be removed. It is expected that part of the through trains operated across the bridge will, when the Staats Zeitung site station and the Center street loop are completed, operate to and across the Williamsburg bridge. Later, when the Manhattan bridge is completed the same operation to some extent may take place between the Brooklyn bridge and the Manhattan bridge. It is not designed, however, that all of the trains crossing the Brooklyn bridge will operate through the subway loop, but part of them will go into pockets at the Manhattan terminal for loading and unloading. The land for the large building which will serve as a terminal both for part of the Brooklyn bridge trains and cars and for part of the Brooklyn subway loop trains, has already been acquired. Thus it will be seen that the city is pursuing a definite policy. It is well that this fact should be appreciated as it helps to show why some of the plans suggested for operating the Brooklyn bridge by continuing the change of cars at the Brooklyn terminal cannot well be adopted.

Improvements Under Way.— Following is a summary of the improvements under way and the public works now in course of construction, having for their aim the lessening of the Brooklyn bridge crush:

The large station to be erected on the site of the Staats Zeitung building, which will facilitate through trains.

New types of cars with greater carrying capacity, larger and more convenient platforms and other arrangements for loading and unloading more quickly.

The lengthening of the elevated terminal at the Manhattan end of the bridge.

The projected Sands street viaduct, which is estimated to allow the operation of twenty-five per cent. more surface cars over the bridge.

The surface loop line for carrying bridge passengers only at a three-cent fare.

The Battery tunnel, which is soon to be in actual operation, and which will deflect considerable travel from the Brooklyn bridge.

The connection of the Broadway (Brooklyn) elevated railroad with the Williamsburg bridge, so that trains may be run to the Delancey street station, which will attract a part of the Williams-

burg and Ridgewood travel and slightly relieve the Brooklyn bridge.

The Center street subway, or so-called Brooklyn loop subway, leading from the Williamsburg bridge to the City Hall, Manhattan, which will afford great relief to the Brooklyn bridge, as it will draw a large portion of the travel which now goes over the Brooklyn bridge, to the Williamsburg bridge, it being a more direct line to Williamsburg, Ridgewood, East New York, Jamaica and Queens county.

The Manhattan bridge, which will afford still more substantial relief, as it will have four sets of tracks for trains instead of one as on the Brooklyn bridge, and which will connect through to City Hall, Manhattan, by subway.

G. STATEN ISLAND.

Many complaints of the inadequacy of transit facilities in the Borough of Richmond have been received by the Commission. These complaints related to defective equipment of cars and tracks, inadequate connections between the different sections of Staten Island, lack of convenient connecting service between the railroads and the ferries, irregularity of service, danger to life from incompetent employees, and other matters. They were voiced in early and forcible protest at a public hearing at which the Staten Island Chamber of Commerce, the Anti-Nuisance League, the borough president and others appeared and demanded certain definite improvements.

The transit facilities in Richmond are in the hands of four companies:

Electric Street Railways.

The Richmond Light and Railroad Company.

The Staten Island Midland Railway Company.

Steam Railroads.

The Staten Island Rapid Transit Railway Co.

The Staten Island Railway Co.

The two steam roads are under one management, and are under stock control of the Baltimore and Ohio Railroad. The two street surface roads are operated practically as one road.

Orders for hearings (Nos. 75 and 76) were served on the two street railways, to determine the necessity of:

1. The extension of the Richmond Light & Railroad Co. line from Bull's Head to Linoleumville, and from Bull's Head to New Springville.

2. The extension of the Staten Island Midland Railway line in Manor road, from Eckstein's Brewery to Egbertsville.

3. Double tracking of certain portions of the road.

4. Increase of number of cars run from St. George during the evening rush hours.

5. Extensive additions and repairs to rolling stock and equipment of both lines.

6. Failure on the part of the street surface roads to issue transfers between the several lines.

Numerous complaints against the two steam railroads related to inadequate service, dangerous grade crossings, and their interference with general passenger and vehicular traffic. This last was particularly true of the crossings at Clifton and Port Richmond, where observation was made and the crossings found closed to travel from 2 hours and 57 minutes to 3 hours and 5 minutes, or for 26.6 per cent. to 37.7 per cent. of the time between 6 a. m. and 6 p. m. Complaint was also made of the insufficient safety devices at such crossings; unnecessary noises of whistling; blowing of steam and shifting of locomotives at night near Clifton, in the vicinity of the United States Marine Hospital and at other places; bad connections with ferries, with apparent disregard of schedules in this particular; nuisance caused by the use of soft coal; discrimination in service to the injury of certain parts of Staten Island in the interests of other localities; excessive fares; refusal of transfers; improper lighting and unsanitary conditions of cars; inadequate and poorly lighted station waiting rooms and shelters.

Orders for hearings (Nos. 77 and 78) were issued against the Staten Island Railway Company and the Staten Island Rapid Transit Railway Company, and after much testimony had been taken, two final orders were issued. Order No. 174 directed:

I. That the Staten Island Railway Company adopt the following precautions and install, at or near grade crossings and

maintain the following appliances for the better protection of its employees and the public.

(A) Bell and Signals.

At all double track crossings not provided with gates, the company shall provide and maintain two automatic, electrically operated warning bells, one on each side of the track and diagonally opposite to each other, so that both bells, at any given crossing, shall be rung by every train passing that crossing, and one bell at all single track crossings, the company to maintain all bells and signals in good working order and test same at each crossing at least once daily, in the morning, reports of such tests to be regularly made and promptly filed at the principal operating office of the company. The provisions of this subdivision are to be completed not later than March 15, 1908.

(B) Warning Signs.

At every grade crossing where double tracks occur, warning signs shall be properly located and maintained, one on either side of the track and diagonally opposite each other, and where one track only occurs, one such sign shall be properly located and maintained. The provisions of this subdivision are to be completed not later than February 10, 1908.

(C) Planking.

Where there are two tracks, each crossing, specified below, shall be planked for the full width between the rails and have one twelve-inch plank outside of each outer rail, such planking to extend across the full width of the highway and filling between guard-planks and to be kept evenly graded with the top of the rails and solidly packed.

Bay View avenue,
Richmond Valley road,
Church street,
East Broadway,
Tompkins avenue,
Old Town road,
Sea View avenue,
Amboy road (second crossing going south),
Washington avenue and Coleaux avenue,
Whitlock station (3 crossings),
Amboy road (first crossing going south),
Giffords lane,
Eltingville road,
Annadale road,
Huguenot avenue.

The provisions of this subdivision are to be completed not later than March 15, 1908.

(D) Gates.

At the Lincoln avenue crossing in Grant City, a single arm gate or bar shall be installed and a flagman shall be kept on duty at this point to operate it, during the months from May 1st to October 1st. The provisions of this subdivision are to be completed not later than May 1, 1908.

(E) Flagman.

That a flagman shall be stationed at each of the grade crossings on William street and Tyrrell street, Tottenville, to remain on duty during all hours in which trains are scheduled to cross these tracks. The provisions of this subdivision are to be complied with not later than May 1, 1908.

II. That all trains be so run as to connect with the Municipal ferry boats at St. George. The provisions of this section are to take effect immediately.

III. That the Staten Island Railway Company prohibit and take all necessary steps to prevent all unnecessary and unreasonable noises and smoke nuisances from engines or shops which it owns or controls at Clifton, St. George, or Tottenville, or at any other point or points where engines run or are allowed to stand; that all labor on Sunday by or for the company, be prohibited, excepting the works of necessity and charity. In work of necessity or charity is included whatever is needful during the day for the good order, health, or comfort of the community. The provisions of this section are to take effect immediately.

IV. That the Staten Island Railway Company install, use and keep in good condition a sufficient number of new lamps of the so-called "Belgian" station lamp type, or other suitable lamps of at least equal candle power, similar to the lamp exhibited to the Commission at the hearing, adequately to light the stations and platforms at the following places:

Tottenville,	Great Kills,
Richmond Valley,	New Dorp,
Huguenot,	Grant City,
Annadale,	Dongan Hills,
Pleasant Plains,	Grasmere,

The provisions of this section are to be completed as soon as possible and not later than April 1, 1908.

V. That the following additions, changes and readjustment of service and time schedule be put into effect without unnecessary delay, but not later than February 1, 1908.

(A) By running a train of not less than three cars to leave Tottenville daily, except on Sundays and holidays, between trains shown as No. 3 and No. 5 on official time table dated October 14, 1907, such train to run to St. George, making all stops between Tottenville and Grasmere, except that the stop at Whitlock may be on flag signal, the train to reach St. George in time to connect with the 7:30 boat from Manhattan.

(B) By running an additional train to leave St. George daily, except Sundays and holidays, between trains No. 34 and No. 36, shown on official time table dated October 14, 1907, said train to leave after arrival of Municipal ferry boat leaving Manhattan at 7 p. m. and to make all stops to Tottenville.

(C) By running an additional train to leave St. George after the arrival of the Municipal ferry boat which leaves Manhattan at 12 o'clock midnight and to make all stops, regular or on signal, to Tottenville.

Order No. 175 affecting the other company, directed:

I. That the Staten Island Rapid Transit Railway Company adopt the following precautions and install and maintain the following appliances for the better protection of its employees and the public.

(A) Bells and Signals.

At all double track crossings not provided with gates, the company shall provide and maintain two automatic, electrically operated, warning bells, one on each side of the track and diagonally opposite to each other, so that both bells, at any given crossing, shall be rung by every train passing that crossing, and one bell at all single track crossings, the company to maintain all bells and signals in good working order and test same at each crossing at least once daily, in the morning, reports of such tests to be regularly made and promptly filed at the principal operating office of the company.

That warning bells be so installed and maintained as to ring

for trains going in either direction at the following street crossings on the North Shore division:

Jersey street, New Brighton,	Lafayette avenue,
Crossing to coal dock and shop yard at West Brighton,	Morning Star road
Broadway, Port Richmond,	Van Pelt avenue,
Maple avenue,	Central avenue,
Elm street	Union avenue,
Sharpe avenue,	South avenue,

and on the South Shore division:

Ariette street,	St. Mary's avenue,
Thompson street,	Tompkins avenue,
Dock street,	Sand Lane.

The provisions of this subdivision are to be complied with not later than March 15, 1908.

(B) Warning Signs.

At Snug Harbor, a suitable sign to be installed, warning the engineer of trains approaching in either direction of the crossing to the coal dock and freight platform of Sailors' Snug Harbor; at Broadway, Maple avenue, Elm street, Sharpe avenue and John street suitable street crossing signs.

At Nicholas street, signs for both sides of the track, the sign now in place to be repaired.

At Maple avenue and St. Mary's avenue suitable street crossing signs.

Chestnut avenue sign to be put in good repair. The provisions of this subdivision are to be complied with not later than February 10, 1908.

(C) Gates.

That the Staten Island Rapid Transit Railway Company install, maintain and operate at all regular hours of traffic, over the company's tracks, suitable double arm gates, at the Broadway crossing, Port Richmond, and single arm gates at Lafayette avenue and Douglas street and Newark avenue.

At Tompkins avenue and at Sand Lane (South Beach station) double arm gates to be maintained and operated at all hours of regular traffic, during the months from May 1 to October 1. The provisions of this subdivision are to be complied with not later than March 15, 1908.

(D) Lamps and Lighting.

That the Staten Island Rapid Transit Railway Company install, maintain and use new lamps of the so-called "Belgian" station lamp type or other suitable lamp of at least equal candle power to the lamp produced by the Staten Island Rapid Transit Railway Company at the hearing before the Commission, in sufficient numbers adequately to light the stations and platforms at New Brighton, Snug Harbor, Livingston, West New Brighton, Port Richmond, Elm Park, Tompkinsville and Stapleton. The provisions of this subdivision are to be complied with not later than February 15, 1908.

II. That all passenger cars used by the Staten Island Rapid Transit Railway Company be adequately lighted. The provisions of this subdivision are to take effect at once.

III. That all trains operated by the Staten Island Rapid Transit Railway Company, either on the North Shore or South Shore divisions, connect at St. George with boats of the Municipal ferry. The provisions of this section are to take effect not later than January 15, 1908.

IV. That the Staten Island Rapid Transit Railway Company prohibit and take all necessary steps to prevent all unnecessary and unreasonable noise and smoke nuisances from engines or shops which it owns or controls at Clifton and St. George, or at any other point or points where engines run or are allowed to stand.

That all labor on Sunday by or for the company be prohibited, excepting the works of necessity and charity. In works of necessity or charity is included whatever is needful during the day for the good order, health and comfort of the community.

Fort Wadsworth Curve.— A fatal accident reported by the Richmond Light and Railroad Company as having occurred on the night of August 23, 1907, when a passenger on a car running

from South Beach to St. George, Staten Island, while pulling down the curtain, lost her balance and fell to the street, the rear trucks passing over her body, appeared to require investigation. An inspector was sent to ascertain and report the facts. He found that the accident had occurred when the car was running at high speed down Richmond avenue, bound north, around what is called the Fort Wadsworth curve into New York avenue; that no warning was given passengers of the approach to the curve; that no inspector was stationed at the curve; that no "go slow" or other sign was erected; and that the passenger killed was standing between the seats of the car and was thrown out by the jolt of the car as it struck into the curve.

An order for a hearing (No. 26) was adopted. At the hearing counsel for the corporation suggested that as the cause of the death was being investigated by the coroner and as a suit had been instituted against the company for damages, inquiry by the Commission be postponed till after the trial of the action. The commissioner presiding refused to act upon this suggestion, saying, "If we should establish the precedent of postponing investigations on hearings of orders based on accidents until trials of damage suits should take place, we should be remiss in our duties."

Counsel for the corporation also stated that the tracks at the place where the accident occurred were on land of the Fort Wadsworth Government Reservation, that the railroad company had been notified to find another right-of-way to South Beach, and to remove its tracks from the reservation, and was endeavoring to secure a new right-of-way. For these reasons it would be undesirable for the Commission to make any order requiring a change of the tracks. The commissioner replied that the facts as stated by counsel should not preclude the Commission from making an order, warranted by the evidence, that the company so long as it did operate cars around that curve, should do so with greater safety.

The testimony of the Commission's inspector showed that the curve was very sharp; that it was impossible for motormen to see any considerable distance on account of the formation of the ground; that cars going in opposite directions could probably not

pass on the curve; that the outside line of track was not elevated; that the car from which the woman was thrown was in perfect condition with its brake in good working order; that the track at the place of the accident was in first class condition; and that the passenger killed was thrown from the car by the jolt or jar as it struck and started around the curve.

The order (No. 50) adopted provided:

First.— That the said Richmond Light and Railroad Company shall cause all cars operated by it, while proceeding towards St. George, to come to a full stop before entering upon the curve formed by the intersection of Richmond avenue and New York avenue; the place of stopping to be distant not more than thirty (30) feet south of the northerly end of the said curve.

Second.— That the said Richmond Light and Railroad Company shall provide and conspicuously display at or near said curve a sign or notice which shall be plainly legible night and day to motormen operating cars bound for St. George, and which shall clearly direct all motormen on cars bound for St. George to stop their cars before entering upon this curve.

IV. HEARINGS — INVESTIGATIONS — REPORTS.

Procedure.— The procedure of the Commission is so well settled and so generally understood, that it seems hardly necessary to state that no matter is finally decided and an order issued, without a public hearing having first been held. Notice of the hearing is always given to the persons concerned, and adjournments are taken from time to time until all the evidence germane to the subject being considered is obtained. Where there is a formal complaint, the complainant appears if he so desires and the defendant company is given a chance to reply. Almost invariably the Commission investigates the matter through its own employees independently of the two parties interested, so that it may have the evidence of experts who cannot be said to be partial or biased.

Where there is no complainant, the procedure is very similar; for some department of the Commission's staff presents the results of its investigations. The persons or companies to be af-

fected are given every opportunity to be heard, and the case is not closed until the evidence is all in. In order that the company may have some definite idea of what is wanted, a proposed form of order is generally prepared and submitted; but this is more to enable progress to be made more rapidly than as an expression of a predetermined conclusion. However, there have been instances where it was impossible to determine upon a tentative form of order, as required by statute, and in such cases a general inquiry has been held, out of which have grown orders for hearings and final orders.

There is still another class of hearings which are either held upon petition or initiated by the Commission itself. Ordinarily these are for the purpose of allowing organizations or individuals to present their views upon a subject under consideration. The Commission has always taken the position that ample opportunity to be heard should be given, and twelve public hearings of this general character were held during the six months just closing. The subjects discussed were:

Form of contracts for the Fourth avenue subway.
Steinway tunnel.
Removal of West Side tracks — Eleventh avenue.
Remedies for Brooklyn bridge congestion.
Subways in the Borough of Queens.
Rapid transit for The Bronx.
The Broadway-Lafayette loop, Brooklyn.
Flatbush avenue subway extension.
Transit conditions in Staten Island.
A north shore subway, Queens.
Uniform accounting.

Summary for Six Months.—All told, 179 hearings were held between July 18 and December 31, 1907. As these were conducted, except in a few instances, when meetings of the Commission or of the Committee of the Whole were not being held, it is apparent that the collection of evidence has consumed a large portion of the time; and necessarily so, for before a wise and fair decision can be reached in any case, all the facts must be established and the companies affected must in all justice be given a full opportunity to present their views.

pass on the curve; that the outside line of track was not elevated; that the car from which the woman was thrown was in perfect condition with its brake in good working order; that the track at the place of the accident was in first class condition; and that the passenger killed was thrown from the car by the jolt or jar as it struck and started around the curve.

The order (No. 50) adopted provided:

First.— That the said Richmond Light and Railroad Company shall cause all cars operated by it, while proceeding towards St. George, to come to a full stop before entering upon the curve formed by the intersection of Richmond avenue and New York avenue; the place of stopping to be distant not more than thirty (30) feet south of the northerly end of the said curve.

Second.— That the said Richmond Light and Railroad Company shall provide and conspicuously display at or near said curve a sign or notice which shall be plainly legible night and day to motormen operating cars bound for St. George, and which shall clearly direct all motormen on cars bound for St. George to stop their cars before entering upon this curve.

IV. HEARINGS — INVESTIGATIONS — REPORTS.

Procedure.— The procedure of the Commission is so well settled and so generally understood, that it seems hardly necessary to state that no matter is finally decided and an order issued, without a public hearing having first been held. Notice of the hearing is always given to the persons concerned, and adjournments are taken from time to time until all the evidence germane to the subject being considered is obtained. Where there is a formal complaint, the complainant appears if he so desires and the defendant company is given a chance to reply. Almost invariably the Commission investigates the matter through its own employees independently of the two parties interested, so that it may have the evidence of experts who cannot be said to be partial or biased.

Where there is no complainant, the procedure is very similar; for some department of the Commission's staff presents the results of its investigations. The persons or companies to be af-

fected are given every opportunity to be heard, and the case is not closed until the evidence is all in. In order that the company may have some definite idea of what is wanted, a proposed form of order is generally prepared and submitted; but this is more to enable progress to be made more rapidly than as an expression of a predetermined conclusion. However, there have been instances where it was impossible to determine upon a tentative form of order, as required by statute, and in such cases a general inquiry has been held, out of which have grown orders for hearings and final orders.

There is still another class of hearings which are either held upon petition or initiated by the Commission itself. Ordinarily these are for the purpose of allowing organizations or individuals to present their views upon a subject under consideration. The Commission has always taken the position that ample opportunity to be heard should be given, and twelve public hearings of this general character were held during the six months just closing. The subjects discussed were:

Form of contracts for the Fourth avenue subway.
Steinway tunnel.
Removal of West Side tracks — Eleventh avenue.
Remedies for Brooklyn bridge congestion.
Subways in the Borough of Queens.
Rapid transit for The Bronx.
The Broadway-Lafayette loop, Brooklyn.
Flatbush avenue subway extension.
Transit conditions in Staten Island.
A north shore subway, Queens.
Uniform accounting.

Summary for Six Months.—All told, 179 hearings were held between July 18 and December 31, 1907. As these were conducted, except in a few instances, when meetings of the Commission or of the Committee of the Whole were not being held, it is apparent that the collection of evidence has consumed a large portion of the time; and necessarily so, for before a wise and fair decision can be reached in any case, all the facts must be established and the companies affected must in all justice be given a full opportunity to present their views.

In the preceding pages (section III) upon Improvements in Transit Facilities, the results of 118 hearings have been set forth, except in those cases — some 13 in number — which had not been completed at the end of the year. The improvements in the service and equipment of the surface, elevated and subway roads in the five boroughs of the city are there given in detail. It is only necessary to deal here with the general investigations that have not been completed but which have been made public. Examinations were being made at the end of the year of the rolling stock, equipment, power-houses, etc., of the Brooklyn elevated and surface lines and of the Union Railway in the Bronx; but no report had been made prior to December 31st. These two matters will be among the first to be taken up after January 1st. Inspections were also under way to check up the conditions upon the lines as to which orders for improvements had not yet been made. Further orders for hearings will be made in 1908.

Subway Improvements.— Pending the construction of new subway lines, the Commission decided that everything possible should be done to increase the carrying capacity of the present subway. Inspectors have constantly been at work to determine how many more trains could be run and when they were needed. But it was also decided that if any changes could reasonably be made in the subway itself and the equipment which would increase the number of passengers carried, the safety of operation and the means of ventilation, and decrease the discomfort of travel during rush hours, the Commission ought to be advised thereof so that it might direct such changes to be made. Mr. Bion J. Arnold, a railroad engineer of broad, practical experience in the construction and operation of railroads was retained. A preliminary report has been made, and several suggestions made therein have already been put into practice by the company without the necessity of an order.

The General Investigation of Transit Lines.— The investigation of the Interborough-Metropolitan Company, the Brooklyn Rapid Transit Company and their subsidiary and controlled companies, which was begun in August, had not been completed at the end of the year. A complete report cannot, therefore, be

made at this time; but a brief résumé may be of value and interest.

The resolution instituting this investigation was adopted July 18th. Chairman Willcox, who presented the resolutions, set forth the purpose of the investigation as follows:

"In taking up the work which this Commission has inherited from the Board of Rapid Transit Commissioners, as well as the performance of the new functions vested in it by the law under which we are organized, we meet a series of fundamental questions, questions of fact growing out of the manner in which the railway corporations in Greater New York are organized, capitalized, controlled and operated. I regard it as fundamental to the proper performance of the duties of this board that it should, at the earliest possible day, familiarize itself thoroughly through proper investigation and report, with all of the conditions of fact and of law which are raised or created by the present actual organization and operation of the street railways in this city. This can only be done by the most thorough investigation, and a report of the facts to this board, which report of facts, when completed to the satisfaction of the board, will constitute the basis for its determination as to the manner in which it shall perform its duty, not only, but what its duties are actually, and the extent to which and the manner in which it can treat or deal with the existing railway companies in respect of future franchises, as well as in respect to the operation of the railways of the city under the franchise, as already enjoyed by each corporation.

"It will undoubtedly be the duty of this board, at some time in the future, and I believe in the near future, after proper hearing, to issue specific orders to increase the adequacy of the service now performed by these companies; but to enable the Commission to take up these lines of inquiry, and to afford hearings preparatory to the issuing of orders, I regard it as absolutely necessary that this general investigation be now made in the aid of the performance by this board of practically all the duties which are to be imposed upon it by the Rapid Transit Law, as well as by the Public Service Commissions Law in respect of railroads. And I think this investigation should be wel-

come to the railway corporations as offering them an opportunity to disclose the facts, just as I am sure it will be welcomed by the public, which, as well as this Commission, should know the facts."

The resolution (Order No. 6) in full was as follows:

WHEREAS, This Commission is vested by law with the general supervision of all common carriers, street railroads, railroad corporations, and corporations controlling and operating street railroads within its jurisdiction, and not only has the power, but is charged with the duty to keep informed as to the general condition of all such railroads and corporations, their capitalization, their franchises, and the manner in which their lines, owned, leased, controlled, or operated, are managed, conducted and operated, not only with respect to the adequacy, security and accommodation afforded by the service but also with respect to their compliance with all the provisions of law; and,

WHEREAS, Practically the entire street railroad service of the boroughs of Manhattan and the Bronx are controlled by the Interborough-Metropolitan Company and operated in its interest; and,

WHEREAS, The Brooklyn Heights Railroad Company, Brooklyn, Queens County & Suburban Railroad Company, Coney Island & Gravesend Railway Company, Transit Development Company, American Railway Traffic Company, South Brooklyn Railway Company, Seabeach Railway Company, Nassau Electric Railway Company, Brooklyn Union Elevated Railroad Company, Brooklyn City Railroad Company, Prospect Park & Coney Island Railroad Company, in the boroughs of Kings and Queens, are all owned and controlled by and operated in the interest of the Brooklyn Rapid Transit Company; and,

WHEREAS, All of the corporations hereinbefore referred to are required by law to furnish such service and facilities as shall be safe and adequate and in all respects just and reasonable, and are also required by law to interchange passengers, freight and property traffic between the lines owned, operated, controlled or leased by every such corporation; and,

WHEREAS, It is necessary for this Commission to determine whether it shall make certain orders to enforce the performance of adequate service by the street railway corporations within its jurisdiction, and take steps to compel the transfer of passengers under the provisions of section 35 of the Public Service Commissions Law; and,

WHEREAS, It is necessary to inform itself as required by law as to precisely the manner in which corporations within its jurisdiction are operated and controlled, as well as the manner and the measure of their capitalization and financial condition, and their ability to render those public services for which they were chartered;

NOW, THEREFORE, BE IT RESOLVED, That this Commission shall forthwith, as required by sections 45 and 48 of the Public Service Commissions Law, investigate and examine the general condition of the Interborough-Metropolitan Company and the Brooklyn Rapid Transit Company, and of all companies controlled by and operated in the interest of either of the said companies, their capitalization, their franchises, and the manner in which their lines, owned, leased, controlled or operated, are managed, conducted and operated including the adequacy, security and accommodation afforded by their service, and with respect to their compliance with all provisions of law, and also for the purpose of determining as the result of such investigation whether the said corporations do in fact illegally and as monopolies control and operate the several properties now under their control and operated in their interests; for the purpose of determining what is the capacity of each of the individual corporations so owned and controlled to render adequate service as required by law, and for the purpose of determining and performing the duties of this board in the premises.

In order that this investigation might be prosecuted in a manner that would not interfere with the regular business of the Commission and with the other investigations being conducted by the counsel to the Commission, Mr. William M. Ivins was retained as special counsel in the matter. Later, in order to have accurate knowledge as to the accounts and books of the companies, the Com-

mission retained as expert accountants Mr. Marvyn Scudder to examine the books and accounts of the Interborough-Metropolitan Company, and Mr. John R. Sparrow to examine the books and accounts of the Brooklyn Rapid Transit Companies.

Hearings were held from time to time until the fourth day of December, when adjournment was taken until January, the adoption of orders for improved service and hearings thereon making this adjournment necessary. In all, there have been thirty-eight hearings upon railway service and conditions, of which twenty-eight were devoted to Manhattan and The Bronx, and ten to the borough of Brooklyn. The record, without papers introduced for identification, constitutes 2,538 printed pages, exclusive of 370 pages of exhibits which are also printed. The general investigation of the Brooklyn Rapid Transit Company is practically complete, but some evidence remains to be taken as to questions of operation and management, as well as the condition and value of its physical properties.

Because of the universal complaint of inadequate service and poor equipment of the surface lines, particularly in Manhattan, the investigation first dealt with service matters. It soon became evident, however, that the investigation needed to go deeply into the financial management and organization history of companies.

The Interborough-Metropolitan Company and the Metropolitan Securities Company, which held the stock of and controlled the operating companies, at first declined to allow access to their books and accounts, and it was found necessary for the Commission to issue orders directing that access be afforded. After deliberation, the companies decided to obey the orders and to allow access to their books.

Receivers Appointed.— Because of matters brought out in this investigation and on complaint filed in regard to the service of the New York City Railway Company in operating some of its lines, special hearings were had and orders issued to increase the service on such lines. During the progress of these investigations, the Commission was served with a copy of an order issued by the Federal Court appointing temporary receivers for the New York City Railway Company.

From the record in that proceeding it appears that on the 24th

day of September, the Pennsylvania Steel Company and the Degnon Contracting Company as complainants, proceeding in the nature of a general creditor's bill in equity, applied to the Circuit Court for the Southern District of New York, and prayed for the appointment of receivers for the New York City Railway Company, the main allegations in application and petition being substantially as follows:

That the complainants were corporations nonresident of this State; that the defendant, the New York City Railway Company, was a corporation organized under the laws of New York State, in possession of and operating the system of street railroads of the Metropolitan Street Railway Company in New York city, that through ownership of capital stock it also controlled other companies owning other lines of street railroads; that the total mileage of railroad system of the defendant including leased lines and lines of companies controlled through ownership of stock, was upwards of 500 miles, and embraced practically the entire surface traction system in the Boroughs of Manhattan and the Bronx in said city, and that appurtenant to such possession, ownership and operation, it had various rights, easements, and privileges, franchises and valuable contracts, etc.; that many lines of this system were acquired by lease from the Metropolitan Street Railway Company, which leased to said defendant its entire system then owned, or thereafter to be acquired for a term of 999 years, and that the system of said lessor so leased to the defendant embraced not only the lines owned by the Metropolitan Street Railway Company, but all lines leased to it, among others being the lines of the Third Avenue Railway Company, including all subsequent additions; that all these lines were operated as part of a single system; that the defendant's equipment was used for the entire system as varying requirements of operation made necessary without assignment to any particular line; that many of the lines leased and operated were without adequate equipment of their own; that in many cases where the motive power of controlled lines had been changed to electricity said controlled lines were without independent power-houses or source of supply of electricity, and were dependent upon other lines for the supply of power; that the New York City Railway Company was indebted

to the complainant, Pennsylvania Steel Company (in the sum of $36,831.38), for rails and track material furnished, etc., which sum had been duly demanded and payment refused; that the complainant, the Degnon Contracting Company was a creditor of said defendant (in the sum of $11,117.27), for work and repairs performed for the defendant, for which payment had been demanded and refused; that the complainants were informed that the defendant under said lease made by said Metropolitan Street Railway Company, had expended large sums of money in making improvements and additions to and upon the lines of its system, including its leased lines, in the sum of more than $20,000,000; that such expenditures exceeded the resources of the defendant; that it had recently entered into contracts for electrification of certain of its lines; that the ultimate liability of the defendant on such work was upward of $4,000,000; that it would be unable to meet such liability; that such work must therefore be suspended, causing heavy loss and subjecting the defendant to heavy liabilities; that it was and would be required to make other large expenditures for maintenance and repair of its equipment and system; that there were large sums in dispute because of claims arising from numerous accidents which had occurred, on which suits had arisen to the number of several thousands; that the defendant had outside floating indebtedness for materials, equipment, taxes and supplies to the amount of upwards of $2,000,000, which were overdue and unpaid, and the defendant unable to pay the same, and the holders of said claims were pressing for payment; that there were other outstanding obligations to the amount of several millions of dollars, payment of which was secured by obligations of various companies controlled by defendant; that said obligations were payable on demand; that the defendant was without means to pay them, and under existing financial conditions, unable to effect new loans; that it had no means at hand with which to meet its immediate pressing needs in operating its system; that suits may be instituted in respect to said claims, executions issued and levied upon lines of railroad, materials and supplies and other property, and that there was grave danger that the lines of the defendant might no longer be operated in a single system because of these suits; that it was essential to the interests of

the defendant and of the public and to the complainants that the property should not be sacrificed; that the gross income of the system decreased during the last fiscal year about $600,000, while the expenses of operating increased about $1,200,000; that the claims of franchise taxes in litigation amounted to over $3,000,000 for the payment of which the Comptroller of the city of New York was pressing his demand, and that the defendant was without sufficient credit to obtain the funds required for the operation of its property and was insolvent; and that unless the court in view of the above and other facts set forth should take said system into judicial custody for the protection of every interest, the result would be a multiplicity of suits, which and the results of which would greatly interfere with and ultimately prevent the proper performance by defendant of its duties as a common carrier, seriously diminish its earnings and make it impossible to operate the system as a whole, and that the system of transfers at present prevailing among the lines of said system would be broken up to the serious inconvenience of the public, and a most important and valuable property dismembered; and the complainants asked for the appointment of receivers to protect the rights of the complainants and all creditors, to administer the property, and to have all the powers ordinarily vested in receivers in like cases, with full power to run and operate the railroad companies, etc. The answer of the defendant, executed and filed the same date, "admits all the allegations of said bill of complaints," and the defendant joined in the prayer of the complainant for the court to take possession of its system and appoint a receiver.

Acting upon the petition of the complainants and the answer of the defendant, the court on the same day issued an order appointing Mr. Adrian H. Joline and Mr. Douglas Robinson, temporary receivers, fixing the amount of their bonds, giving usual powers of receivers in such cases, and issuing the usual injunction preventing interference with their possession or management on the part of any party and interest, except on further order of the court.

Receivership Proceedings.— Under date of October 1st, the Metropolitan Street Railway Company filed a petition with the court, in which it set forth the facts of the lease referred to above

and its interests in the matter, and prayed that it might become a party defendant in the suit, and that the receivership be extended so as expressly to embrace the interests of said Metropolitan Street Railway Company, which company thereby submitted itself and its property to the jurisdiction of the court. Pursuant to such application, the court on the 1st day of October issued an order directing that the receivership be extended to the properties of said Metropolitan Street Railway Company, and that the receivers of the New York City Railway Company be appointed receivers of the properties of Metropolitan Street Railway Company, with the same powers and duties, etc.

Under date of October 8th, the Morton Trust Company petitioned the court for an order permitting it to make the receivers parties in a bill about to be filed by it for the enforcement of its rights under a certain mortgage, under which the Metropolitan Street Railway Company had conveyed to said Trust Company as trustee all the street surface railroads and property owned by it, and all its rights and property by lease or otherwise in all the street surface railroads held and operated by it as lessee, alleging that in the provisions of the mortgage it was provided that in case any judicial proceeding by any party other than the trustee should result in the appointment of a receiver for the Metropolitan Street Railway Company, the Morton Trust Company as trustee should be entitled forthwith to exercise certain rights and powers conferred by the mortgage, and that such condition becoming operative by the appointment of receivers, the Morton Trust Company, upon request of persons owning or representing a large amount of bonds issued and secured by the mortgage, was about to file in the court a bill for the enforcement of its rights under the said mortgage.

On the same date, the court issued an order making the receivers party to the bill of complaint of the Trust Company. The complaint of the Morton Trust Company and the papers set forth at length the property of the Metropolitan Street Railway Company embraced in the mortgage, and on the 9th day of October the court appointed Mr. Adrian H. Joline and Mr. Douglas Robinson under the bill of complaint in the Morton Trust Company action, receivers of all the railroads, properties and premises mort-

gaged to said Trust Company by the Metropolitan Street Railway Company. Under date of October 9th, Adrian H. Joline and Douglas Robinson, who were on September 24th appointed temporary receivers, were made permanent and continued as receivers during the pendency of the suit.

In the order continuing the receivers, the court instructed them to employ an accountant of highest standing to make an investigation of the books and papers, also an expert engineer of like standing to make a thorough examination of the physical condition of the property. In regard to this provision, the receivers, under date of October 17th, advised the court that the Public Service Commission had engaged two experts to advise it concerning the equipment of the property involved; that the chairman of the Commission had requested that the expert detailed to examine the surface lines be afforded such facilities as might be proper for examining the properties in charge of the receiver, that it was evident that the examination to be made by such expert would be of the same character to a very considerable extent, as was required to be made by the receivers by order of the court, and suggested the advisability of deferring for the present, the employment of such an expert engineer by the receivers, in order to take advantage of the report of the expert appointed by the Commission. The court agreed with that suggestion.

Charges of collusion and fraud in the proceedings resulting in the appointing of the receivers by the United States Court, were made upon the record; among others, that the Public Service Commission, which was created particularly for the purpose of remedying grave abuses which had for a long time existed in the management and operation of the defendant and the street railroads in its possession, had proceedings pending to compel said defendant to furnish proper, sufficient and safe transportation for passengers, and that one reason for the collusive appointment of receivers was to impede and prevent the full investigation and examination of the properties by this Commission.

The charges of collusion and fraud were not upheld by the court.

Conditions Developed.—While the appointment of receivers may have been hastened by the Commission's investigation, it was

the result of conditions for which this Commission is in no way responsible, and which antedated the creation of the Commission. Some of these conditions were revealed by the investigation, such as the misuse of corporate funds, the diversion of earnings from legitimate channels, profligate management, reckless, if not illegal, expenditures, and loose and incorrect accounting. It was also shown that the reported cost per mile of street railroads varied from $2,553,097 per mile for the Fulton street railroad, operated by horse cars, to $24,836 reported by the Tarrytown and White Plains road operated by electricity. While the various steps in the mergers, leases and contracts finally culminating in the Interborough-Metropolitan consolidation extended back nearly a score of years, it was found that the books of one of the important corporations, which should contain a record of its business and transactions back of 1902, had been sold and destroyed.

The examination of the remaining books showed that salaries of officers, contributions to civic organizations, counsel fees, discount on bond sales, fees for increasing capital stock, moneys paid directly or indirectly to influence legislation and official action by commissions, "to secure the demonstration of public approval in respect to particular routes" and to "accelerate" public opinion, were charged to and carried in "construction," or property and franchise accounts, thus appearing as assets on the corporation's books. It was shown that this corporation had paid $916,438.68, and another corporation under the same control $238,227.66, to lawyers, in about four and one-half years; that $180,000 was paid to one official with no vouchers on file; that $260,000 was paid to one man for services, practically of no direct value after the consolidation; that $250,000 is being paid the same man at the rate of $50,000 a year to retain his services, for which as yet no work has been done; that $75,000 was paid for the drawing of one lease, and $25,000 for preparing for and making one argument; that $965,607.19 was charged against the purchase of a railroad corporation, of which amount the seller retained only $250,000, and which corporation had never obtained the consent of property owners along its proposed route, and toward the construction of which not a shovelful of dirt had ever been turned, nor a pound of rails purchased. Many other like

expenditures were shown to have been made for which no vouchers were found, and which were authorized by no executive action.

New York City Railway Company, which reports having transported 344,770,368 passengers excluding transfers for the year ending with June 30, 1907, and net earnings from operation of $7,082,795.12 with other income of $1,194,432.51, is yet compelled to report a deficit in gross income account for the year of $3,330,201.08, and to invoke the protection of receivers appointed by the court. These receivers report its cars and equipment generally to be sadly in need of extensive repairs and overhauling, indicating that this regrettable condition is due to a lack of proper expenditure for the upkeep of plant and equipment.

The chief reason given by the officials of the New York City Railway Company in their testimony for delays in the operation of its surface cars was the interference of vehicular traffic at intersecting streets and places of most congestion. This matter was given special attention by the Commission and testimony was taken to determine what plans could be devised and what municipal or State legislation was needed to reduce such interference to a minimum. It was the testimony of police officials from Deputy Commissioner to patrolmen that 75 per cent. of the delays to surface cars were the fault of the railroad itself from unskillful operation and defective equipment of its cars, and from interference by day work on the tracks which could be as expeditiously done at night or more so.

The proper regulation of street traffic is a very important question, and it is hoped that regulations will be devised and put in force which will do away with delays without injury to the prompt and proper conduct of the immense vehicular business of the city. Experienced inspectors are constantly observing the actual situation at the points of most interference and have made comprehensive reports, to be used in framing such further orders as appear necessary.

Information Required of Companies.— In several instances where the Commission desired information, it was not necessary to institute a formal inquiry, but merely to direct the companies to file documents or answer specific questions. For example, orders (Nos. 2 and 3) were issued directing gas, electric, railroad and

street railroad companies and all other common carriers under the jurisdiction of the Commission to file a copy of every record kept and particularly the forms of accounts used. This information was needed in connection with the preparation of a uniform system of accounts.

Other orders of a similar character required:

(1) Railroads and street railroads to file forms of records and memorandum kept by them as to the movement of traffic and statements showing the number, character and seating capacity of passenger cars as of September 1st in the years 1905, 1906 and 1907 (Order No. 4).

(2) Railroad corporations to file schedules showing rates, fares, and charges for the transportation of passengers and property within the State, in accordance with Section 28 of the Public Service Commissions Law (Order No. 53).

(3) Express companies to file schedules showing rates, fares and charges for the transportation of property between all points lying within this district, as required by section 28 of the Public Service Commissions Law (Order No. 54).

(4) Railroad corporations, street railroad corporations, common carriers and other stock corporations to file a sworn statement giving (a) the detailed amount of capital stock of any other railroad corporation, street railroad corporation or common carrier held by it, and (b) the amount of its capital stock held by any other stock corporation, railroad corporation, street railroad corporation or common carrier, as of July 1, 1907 (Order No. 136).

(5) Gas corporations, electric corporations and every stock corporation to file a sworn statement giving (a) the name of every gas and electric corporation of which it held capital stock, and (b) the amount of its capital stock held by any other stock corporation, gas corporation or electric corporation as of July 1, 1907 (Order No. 137).

(6) Railroads and street railroads and gas and electric companies to file their certificates of incorporation, consents of property owners and public authorities, consolidation agreements, traffic agreements, acts of the Legislature affecting their rights,

franchises, maps of tracks, conduits, pipes, etc., and all other documents which show how their rights or property have been obtained or held.

The forms, documents and reports received in compliance with these orders are very voluminous. They are now being arranged, tabulated and analyzed, but the work had not been completed at the close of the year. The franchise documents particularly are very valuable, for when they are compiled in proper sequence, there will then be for the first time a complete set of the muniments of title of each corporation in the office of a public authority.

The inter-company holdings of stock are shown in tables in an appendix.

Annual Reports of Corporations.— Prior to the establishment of this Commission every corporation under the jurisdiction of the Railroad Commissioners was required to file annually a report stating the more important facts regarding its operations for the preceding year and its condition at the end of the year. The Commission of Gas and Electricity had also required a report similar in character to be made to it by gas and electric corporations. In each instance the report was for the year ending June 30, and had to be filed with the proper official within a few months after July 1st.

The Public Service Commissions Law transferred the power and the duty of requiring such reports from these two bodies to the Public Service Commissions. For the convenience of all concerned the forms of reports which had been distributed prior to July 1st and according to which the companies had been ordered to make statements as of June 30, 1907, were allowed to continue in force by this Commission. It will probably be found advisable, prior to June 30, 1908, before which date blank forms for the annual reports should be in the hands of each company, to introduce certain changes and modifications in the forms for the year 1906–7. The nature of these changes is now being considered, but the exact form for 1907–8 will probably not be decided upon until it is necessary to send the copy to the printer, so that advantage may be taken of each additional month of experience.

The statute requires that the form of this annual report for common carriers (railroads, street railroads, sleeping-car companies, express companies, etc.), shall conform as nearly as may be to the report required by the Interstate Commerce Commission. Soon after July 1st a member of this Commission conferred with Professor Henry C. Adams, in charge of the Division of Statistics and Accounts of the Interstate Commerce Commission, who stated that a revision of the form of report then in use was being considered. Several conferences have since been held and it is now expected that early in 1908 a form of report will be adopted by the Interstate Commerce Commission and by this Commission which will be mutually satisfactory and acceptable.

As to the annual reports from gas and electric companies, the law requires that certain facts relative to capitalization, receipts, expenditures, salaries, property and franchises, shall be called for in the report, but beyond these requirements and the instruction above referred to relating to the reports of common carriers, the Commission is entirely free to adopt such form of report as it considers desirable. It is provided, however, that if any changes are made in the form of report which would require an alteration in the method or form of keeping the accounts, at least six months' notice before the *expiration* of the year to which these changes apply shall be given in the case of common carriers, and six months' notice before the *beginning* of the year in the case of gas and electric companies. Experience has shown that neither one of these provisions is satisfactory. Every company, whether a common carrier or a gas corporation, should receive notice before the *beginning* of the year of any changes in forms for operating statistics (financial or otherwise) to be put in practice for that year. A change made in the middle of the year might involve considerable expense and serious inconvenience, and perhaps it would be impossible to reconstruct the statistics for operations that have passed and of which no new measurements could be made. Upon the other hand, six months' notice of a change is more than is necessary. Probably a notice of two or three months would be satisfactory to the companies and certainly would allow sufficient time to have new

forms printed and to provide for the instruction of their employees in the new methods. Further, if six months' notice must be given of any change and if reports are not required to be filed before September 30th, there is hardly time to ascertain exactly what changes, if any, should be made. It would seem wise, therefore, to change the provisions in the law regarding reports so as to provide uniformly that notice of any changes affecting the form of accounts should be served at least two months before the beginning of the year to which they shall apply.

The data contained in the reports filed by the companies for the year ending June 30, 1907, have been tabulated and analyzed by Mr. Adna F. Weber, the Chief Statistician of the Commission, and appear in a subsequent volume.

Uniform Statistics and Accounts.— This Commission may prescribe a uniform system of accounts to be used by every corporation over which it has jurisdiction. It may determine the methods of keeping such accounts and all other records, books and memoranda. The forms of accounts, records and memoranda for common carriers must conform as nearly as may be to those established by the Interstate Commerce Commission, and the law prohibits the keeping of any accounts, records or memoranda other than those prescribed by the Interstate Commerce Commission or the Public Service Commission. These last provisions do not apply to gas and electric corporations.

When this Commission came into existence, it found that the Interstate Commerce Commission had prescribed certain accounting forms and methods for steam railroads doing an interstate business; that it had under consideration those for express companies and sleeping-car companies, but that no progress had been made with the accounts for electric roads or street railways that ran from one state to another (a small portion of the entire electric mileage of the country). Our predecessors, the Railroad Commissioners, had not attempted to prescribe a uniform system, but the Commission of Gas and Electricity had considered the matter and had drafted a tentative system for discussion, which has been published in the report of the Commission for the six months ending June 30, 1907.

From the very beginning this Commission has realized the importance and necessity of a uniform system of accounts for all corporations of the same kind, not merely because of the value of uniform statistics to this Commission in arriving at wise decisions, but also because of their value to the companies themselves, to the holders of their securities, to investors and to those who use the service — the public Preliminary to the preparation of a uniform system of records, the Commission issued an order immediately after its organization requiring all the companies under its jurisdiction to submit copies of such records, accounts and memoranda as were then in use by them. Conferences have been held with the Interstate Commerce Commission, the Public Service Commission for the Second District, similar commissions in other states and the associations representing the various classes of corporations, for however desirable and beneficial uniform statistical methods would be when applied to the corporations within the area of Greater New York, the best results could not be obtained without uniformity in the systems adopted by the two Commissions of this State, by the Interstate Commerce Commission and by similar commissions of other states. Of course, it has been recognized that it might be impossible to obtain uniformity in all respects, but that it would be extremely desirable if it could be obtained, has been acknowledged from the beginning and considered worth an effort in this direction.

As a result, several conferences relative to electric railway matters have been held in this city and in Washington. It has been found impossible, owing to the large number of public bodies and of the associations representing the corporations, to prepare a satisfactory system of accounts for use by the street railway companies during the year ending June 30, 1908, and for adoption in the annual reports to the Commission covering this period; but considerable progress has already been made, and early in 1908 it will probably be possible for this Commission to adopt an accounting system for street railways which will be in substantial harmony with the systems adopted by the Commission for the Second District, the Interstate Commerce Commission, the Railroad Commissioners of several other states

and also by the companies. It can then be put in force upon July 1, 1908, for all the companies in this district and be made the basis of the financial portion of the annual reports for the year ending June 30, 1909.

Accounts for Steam Railroads.— The Interstate Commerce Commission has recently approved, as stated above, a revised scheme of accounts for all steam railroads doing an interstate business. This scheme has been adopted by this Commission, by the Public Service Commission for the Second District, and by the railroad commissioners of other states, so that upon this point there is now entire uniformity in a great portion of the United States. In this district, the order takes effect upon January 1, 1908, and the annual report for the year 1907–8 will include financial statements according to this form. It is not necessary to republish here the comprehensive instructions which specify in detail how the accounts shall be kept; the titles of the accounts will suffice to give a general idea of the scheme. Full particulars may be found in the minutes of the Commission.

EXPENDITURES FOR ROAD AND EQUIPMENT (CAPITAL ACCOUNT).

PRIMARY ACCOUNTS.

I. Road —

1. Engineering.
2. Right of way and station grounds.
3. Real estate.
4. Grading.
5. Tunnels.
6. Bridges, trestles and culverts.
7. Ties.
8. Rails.
9. Frogs and switches.
10. Track fastenings and other material.
11. Ballast.
12. Track laying and surfacing.
13. Roadway tools.
14. Fencing right of way.

I. Road — *Continued.*

15. Crossings and signs.
16. Interlocking and other signal apparatus.
17. Telegraph and telephone lines.
18. Station buildings and fixtures.
19. General office buildings and fixtures.
20. Shops, enginehouses and turntables.
21. Shop machinery and tools.
22. Water stations.
23. Fuel stations.
24. Grain elevators.
25. Storage warehouses.
26. Dock and wharf property.
27. Electric light plants.
28. Electric power plants.
29. Electric power transmission.
30. Gas-producing plants.
31. Miscellaneous structures.
32. Transportation of men and material.
33. Rent of equipment.
34. Repairs of equipment.
35. Earnings and operating expenses during construction.
36. Cost of road purchased.

II. Equipment —

37. Steam locomotives.
38. Electric locomotives.
39. Passenger train cars.
40. Freight train cars.
41. Work equipment.
42. Floating equipment.

III. General expenditures —

43. Law expenses.
44. Stationery and printing.
45. Insurance.
46. Taxes.
47. Interest and commissions.
48. Other expenditures.

OPERATING REVENUES.

PRIMARY ACCOUNT.

I. Revenue from transportation —
1. Freight revenue.
2. Passenger revenue.
3. Excess baggage revenue.
4. Parlor and chair car revenue.
5. Mail revenue.
6. Express revenue.
7. Milk revenue (on passenger trains).
8. Other passenger train revenue.
9. Switching revenue.
10. Special service train revenue.
11. Miscellaneous transportation revenue.

II. Revenue from operations other than transportation —
12. Station and train privileges.
13. Parcel-room receipts.
14. Storage — freight.
15. Storage — baggage.
16. Car service.
17. Telegraph service.
18. Rents of buildings and other property.
19. Miscellaneous.

OPERATING EXPENSES.

PRIMARY ACCOUNTS.

I. Maintenance of way and structures —
Superintendence.
Ballast.
Ties.
Rails.
Other track material.
Roadway and track.
Removal of snow, sand and ice.
Tunnels.
Bridges, trestles and culverts.
Over and under grade crossings.

I. Maintenance of way and structures — *Continued.*

Grade crossings, fences, cattle-guards and signs.
Snow and sand fences and snowsheds.
Signals and interlocking plants.
Telegraph and telephone lines.
Electric power transmission.
Buildings, fixtures and grounds.
Docks and wharves.
Roadway tools and supplies.
Work equipment — repairs.
Work equipment — renewals.
Work equipment — depreciation.
Injuries to persons.
Stationery and printing.
Insurance.
Other expenses.
Maintaining joint tracks, yards and other facilities — Dr.
Maintaining joint tracks, yards and other facilities — Cr.

II. Maintenance of equipment —

Superintendence.
Steam locomotives — repairs.
Steam locomotives — renewals.
Steam locomotives — depreciation.
Electric locomotives — repairs.
Electric locomotives — renewals.
Electric locomotives — depreciation.
Passenger train cars — repairs.
Passenger train cars — renewals.
Passenger train cars — depreciation.
Freight train cars — repairs.
Freight train cars — renewals.
Freight train cars — depreciation.
Electric equipment of cars — repairs.
Electric equipment of cars — renewals.
Electric equipment of cars — depreciation.
Floating equipment — repairs.
Floating equipment — renewals.
Floating equipment — depreciation.

II. Maintenance of equipment — *Continued.*
Shop machinery and tools.
Power plant equipment.
Injuries to persons.
Stationery and printing.
Insurance.
Other expenses.
Maintaining joint equipment at terminals — Dr.
Equipment borrowed — Dr.
Maintaining joint equipment at terminals — Cr.
Equipment loaned — Cr.
Cleaning account — hire of equipment.

III. Traffic expenses —
Superintendence.
Outside agencies.
Advertising.
Traffic associations.
Fast freight lines.
Industrial and immigration bureaus.
Stationery and printing.
Insurance.
Other expenses.

IV. Transportation expenses —
Superintendence.
Dispatching trains.
Station employees.
Weighing and car service associations.
Stock yards and grain elevators.
Coal and ore docks.
Station supplies and expenses.
Yardmasters and their clerks.
Yard conductors and brakemen.
Yard switch and signal tenders.
Yard supplies and expenses.
Yard enginemen.
Enginehouse expenses — yard.
Fuel for yard locomotives.
Water for yard locomotives.

IV. Transportation expenses — *Continued.*
Lubricants for yard locomotives.
Other supplies for yard locomotives.
Operating joint yards and terminals — Dr.
Operating joint yards and terminals — Cr.
Motormen.
Road enginemen.
Enginehouse expenses — road.
Fuel for road locomotives.
Water for road locomotives.
Lubricants for road locomotives.
Other supplies for road locomotives.
Operating power plants.
Purchased power.
Road trainmen.
Train supplies and expenses.
Interlockers, block and other signals — operation
Crossing flagmen and gatemen.
Drawbridge operation.
Clearing wrecks.
Telegraph and telephone — operation.
Operating floating equipment.
Express service.
Stationery and printing.
Insurance.
Other expenses.
Loss and damage — freight.
Loss and damage — baggage.
Damage to property.
Damage to stock on right of way.
Injuries to persons.
Operating joint tracks — Dr.
Operating joint tracks — Cr.

V. General expenses —
Salaries and expenses of general officers.
Salaries and expenses of clerks and attendants.
General office supplies and expenses.
Law expenses.

V. General expenses — *Continued.*
- Insurance.
- Relief department expenses.
- Pensions.
- Stationery and printing.
- Other expenses.
- General administration joint tracks, yards, and terminals — Dr.
- General administration joint tracks, yards, and terminals — Cr.

Mileage Statistics.—A classification has also been adopted for the operating statistics relating to the mileage of locomotives. cars and trains. The classification, omitting the instructions, is as follows:

I. Classification of locomotive-miles.
- Revenue service:
  - Freight locomotive-miles.
  - Passenger locomotive-miles.
  - Mixed locomotive-miles.
  - Special locomotive-miles.
  - Switching locomotive-miles.
- Nonrevenue service locomotive-miles.

II. Classification of car-miles.
- Revenue service:
  - Freight car-miles.
    - Loaded.
    - Empty.
    - Caboose.
  - Passenger car-miles.
    - Passenger.
    - Sleeping, parlor and observation.
    - Other passenger-train cars.
  - Special car-miles.
    - Freight — loaded.
    - Freight — empty.
    - Caboose.
    - Passenger.

II. Classification of car-miles — special car-miles — *Continued.*
Sleeping, parlor and observation.
Other passenger-train cars.
Nonrevenue service car-miles.
III. Classification of train-miles.
Revenue service:
Freight train-miles.
Passenger train-miles.
Mixed train-miles.
Special train-miles.
Nonrevenue service train-miles.

Other Common Carriers.— Inasmuch as the Interstate Commerce Commission found it impossible before the end of the year to adopt systems of accounts for sleeping-car and express companies, this Commission has concluded not to attempt to put in operation a system for this class of companies prior to July 1, 1908. The Interstate Commerce Commission has supervision of all common carriers doing an interstate business. The sleeping-car and express companies now under the jurisdiction of this Commission and of this Commission alone are so few in number, and the adoption of a distinct system of accounts for these few companies would be so inconvenient and inadvisable that the Commission has decided to await the decision of the Interstate Commerce Commission before adopting systems of accounts. This will probably be early in the year and will make it possible to put the scheme into operation at the beginning of the next fiscal year, viz.; July 1, 1908.

Accounts for Gas and Electric Companies.— In order that both Public Service Commissions may have the same system of accounts for gas and electric companies, this phase of the work was early discussed with the Commission of the Second District. Several conferences have also been held with the associations representing the companies. If the companies throughout the State were more uniform as to the nature and scope of their operations, the problem would have been more simple; but with a few corporations whose financial operations amount to several millions of dollars upon the one hand and upon the other a considerable number of small companies whose annual incomes do not exceed

a few thousands, it is difficult to frame a single system of accounts which will go sufficiently into the details of the large companies and yet be suited to the limited operations of the small companies. It now seems probable that a satisfactory solution will be found and one which will be satisfactory to practically all of the companies. In this work the officials of the companies have generously assisted the Commission, and the fact that early in the year probably the Commission will be able to adopt a system of accounts for gas and electric corporations, is largely due to the co-operation and assistance given by the private corporations.

In the case of the electric companies the work has been held back somewhat by the difficulty of framing a scheme for street railway companies which would be approved by the Interstate Commerce Commission and the companies. Many of the electric companies supply current both for lighting and for street railway power. It is advisable, therefore, that the accounts dealing with the generation of electricity should be the same for street railway companies as for electric lighting companies. However, it is probable that within a few months the whole accounting question will be settled and the new systems made ready for adoption.

The Commission has under consideration a change in the date of the ending of the fiscal year for gas and electric companies from June 30th to December 31st. At present *all* companies report as of June 30th, although the fiscal year of a large number ends upon December 31st. The difference in dates is inconvenient to the companies and delays the filing of their reports with this Commission. Further, all the work of compilation and analysis of all these reports for the amended report to the Legislature must now be done by the Statistical Bureau within a very few months at the end of the year, which results in great congestion. It is practically impossible to change the ending of the fiscal year for common carriers, as Congress adopted June 30th several years ago and the Interstate Commerce Commission has arranged all of its work to harmonize with this date. In the case of gas and electric companies, there seems to be no reason why a change may not be made. The companies greatly desire it, and it would so distribute the work of the Statistical Bureau of the Commission throughout the year as to be of great convenience and economy.

V. GAS AND ELECTRICITY.

The duties and powers of the Commission of Gas and Electricity have been transferred by law to the Public Service Commission, which now has general supervision of all gas and electric corporations within Greater New York. These number twenty-eight, of which sixteen are gas companies, nine are electric companies and three furnish both gas and electricity. The total stock and bonds issued and outstanding of these companies was, as reported by them for June 30, 1907, $353,299,533.80. Their gross earnings from operation for the year ended June 30, 1907, were $48,363,840.29. The expenditures for operation during the same period were $36,318,491.09. The companies paid out, either as interest on bonds or dividends on stock, $12,370,091.57. The amount of gas manufactured reached the total of 34,656,922,800 cubic feet. The amount sold to private consumers and for public lighting was 32,624,295,546 cubic feet. The kilowatt hours of electricity produced were 424,027,824; the kilowatt hours sold, 288,951,302. Of the gas companies reporting, eleven made water gas, four coal and water gas and one coal gas. Of the electric companies three are operated by other companies. The total number of "consumers" of gas during the year ended June 30, 1907, was 1,011,831. The number of gas meters set June 30, 1907, was 893,184. The number of "consumers" of electricity during the same period was 87,745 and the electric meters set June 30, 1907, 108,590.

Legislation as to Price of Gas and Electricity.— In 1906, the Legislature fixed the price of gas at 80 cents per 1,000 cubic feet in the borough of Manhattan, the borough of Brooklyn, except the Thirtieth and Thirty-first wards, the First ward of the borough of Queens, the borough of the Bronx, except that portion of it formerly contained in the town of Westchester, outside of the villages of Wakefield and Williamsbridge (chapter 125). In the Second and Fourth wards of the borough of Queens and in the Thirtieth ward of the borough of Brooklyn the price was fixed at $1.00. In the Third ward of the borough of Queens, in the Thirty-first ward of the borough of Brooklyn and in the borough of Richmond, the law provided that the price should be $1.25

for the remainder of the year 1906, with a five cents reduction per year until 1910, when the price will have reached $1.00. In the former town of Westchester, outside the villages of Wakefield and Williamsbridge, the price was fixed at $1.15 during the years 1906, 1907 and 1908, with a reduction of five cents per year thereafter until the price had reached $1.00. By chapter 736 of the Laws of 1905 the price of gas sold to the city of New York was fixed at seventy-five cents per thousand cubic feet. Chapter 752 of the Laws of 1905, as amended by chapter 616 of the Laws of 1906, made the maximum price of electricity ten cents per kilowatt hour in the boroughs of Manhattan and the Bronx, with the exception of the town of Westchester in the latter borough, where the price was fixed at twelve cents per kilowatt hour. In the boroughs of Brooklyn, Richmond and Queens, with the exception of the Fifth ward of Queens, the maximum rate was fixed at twelve cents per kilowatt hour. No rate was fixed by legislative enactment for the Fifth ward of Queens. The maximum rate charged by the company supplying that ward, is fifteen cents per kilowatt hour. Varying discounts, according to the amount of current consumed are allowed by all the companies, down to three cents per kilowatt hour for a monthly consumption of 50,000 kilowatt hours or over.

The Eighty-Cent Gas Case.— Prior to the passage of chapter 125 of the Laws of 1906, the former Commission of Gas and Electricity issued an order, after an investigation, fixing the price of gas sold by the Consolidated, New Amsterdam (N. Y.), Mutual, Standard, Central Union and Northern Union Gas Companies, operating in the boroughs of Manhattan and the Bronx at eighty cents per thousand cubic feet. The order of the Commission and the act of the Legislature were contested by these companies, and a suit was begun in the United States Circuit Court by the Consolidated Gas Company against the Attorney-General of the State of New York, District-Attorney of New York county, city of New York, and the late Commission of Gas and Electricity, upon the ground that the statutes and order were in violation of provisions of the United States Constitution.

In June, 1906, an injunction was granted by Judge Lacombe

which, pending the action, restrained defendants from acting under and by virtue of authority of chapter 736 and 737 of the Laws of 1905 and chapter 125 of the Laws of 1906, and the order of the Gas Commission of February 23, 1906. The language of the injunction upon this point is as follows:

> "That, until the entry of an order upon the said motion, the defendants and each of them, their officers, agents, servants and employees, and each and every person acting under and by virtue of the authority of the acts and order referred to in the bill of complaint, or any of them, be and they hereby are enjoined and restrained from in any way enforcing or attempting to enforce the said acts and order, or any of the provisions thereof, against the complainant."

The effect of this injunction was to restore the price of gas in Manhattan and the Bronx to the dollar rate and also prevent the enforcement of penalties for violations of the regulations contained in chapter 736 of the Laws of 1905 as to the candle power of gas and the pressure at which it should be delivered. The difference in amount between the old rate of $1.00 and the 80-cent rate was by order of the court turned over to the custody of the court pending the final determination of the actions. In Brooklyn, the Brooklyn Union Gas Company has billed its customers at the 80-cent rate under protest.

As the successor of the former Commission of Gas and Electricity, within the territory of Greater New York, this Commission comes under the injunction and is restrained from enforcing the order of the Gas Commission or the legislative enactments. Attention should further be called to the fact that chapter 737 of the Laws of 1905, one of the laws which the Commission is restrained from enforcing, is the law conferring power upon the Commission of Gas and Electricity. It was embodied in the Public Service Commissions Law, and hence this Commission is restrained by injunction from exercising the powers thereby conferred upon it as to gas and electric companies.

For nearly a year after the injunction was issued, the case pro-

ceeded before a special master appointed to take testimony, make all needed computations and fully ascertain the facts. The master's report had been made before this Commission took office, but had not been approved by the court. In October, 1907, the members of this Commission were substituted as defendants in place of the former Commissioners of Gas and Electricity, and leave to file supplementary exceptions was granted. When the case came on for final hearing, November 4, 1907, the Commission was represented by Mr. Abel E. Blackmar, its counsel, and Mr. Edward B. Whitney, as special counsel. The argument continued for a week, the case being submitted on November 11th. On December 20th, Judge Hough, District Judge, filed a decision and opinion in favor of the complainant.

In the report of the master, the value of the assets of the complainant, employed in the production and distribution of the gas sold by it, were found to be as follows:

Tangible assets	$63,357,000 00
Intangible assets, franchise and good will..	20,000,000 00
Total	$83,357,000 00

In the opinion of the judge, the value of the real estate, included in the tangible assets by the master, was reduced from $13,461,000 to $11,151,845, and the working capital from $3,616,000 to $1,616,000. Items of tangible assets amounting to $12,050,000 were excluded and as a result the tangible assets are found by the court to be, instead of $63,357,000, the sum of $47,100,845. The operating cost was found by the court to be, $6,779,146.28 instead of $8,746,265.19, as claimed by the complainant, and the net income, humanly certain to be earned by complainant under the acts in question, not less than $3,030,000, which is a little over six per cent. on the amount of the tangible assets of $47,000,000.

The court holds as to intangible assets that good-will is not capable of capitalization as against the State, but that franchises under the authorities decided by the courts must be considered not only as property, but as productive and inherently

valuable property, and that their value, if ascertainable, must be added to the complainant's capital account before declaring a rate of return permitted it by the statutes complained of. The value of the franchise is ascertained by the court from the amount of stock lawfully issued against it and upon which dividends have been maintained since 1884, to have been $7,781,000, and it is held that to the extent of its present value, it is entitled to protection against confiscatory regulation, inasmuch as the tangible property of the company in 1884 was found by appraisal to be $30,000,000, and has since grown to $47,000,000 in 1905, the fair method of fixing the value of the franchise in 1905 is to assume the same rate of growth in the value of the franchise, making its value $12,000,000.

The valuation of $47,000,000 for the tangible assets and $12,000,000 for the franchise makes a total of $59,000,000, from which the return under the action of the Legislature and the Gas Commission would be $3,030,000, or considerably less than six per cent. The court decided that this is not fully fair or wholly reasonable, and is to some extent confiscatory.

An appeal will be taken to the Supreme Court of the United States as soon as the decree is entered.

The condition of this case and particularly the existence of the injunction restraining the Commission from enforcing the law have prevented the issuance of orders under Article IV of the Public Service Commissions Law, except of a very general character. However, the Commission has been collecting through its bureaus a considerable amount of data for use when the injunction is removed so that a number of matters may then be speedily settled, such as the amount to be repaid to a consumer when his meter is fast, charges for the laying of service pipes, responsibility for money deposited in prepayment meters, conditions upon which the supply of gas may be turned off, regulation of pressure, deposits required of consumers, responsibility for meters upon consumers' premises, and other improvements of service.

Complaints Remedied.— Probably no portion of the work of the Commission has brought forth more emphatic and more general commendation than its handling of consumers' complaints against gas and electric companies. These complaints have covered an

extremely wide field including individual cases of lack of proper illumination, wrong billing, removal of meters without notification to consumers when bills have been in dispute, excessive pressure or lack of pressure of gas, failure of companies to supply gas or electricity upon demand and the alleged inattention on the part of the companies to requests of customers who have gone to them with what they believe to be real grievances. This alleged inability to secure proper attention and relief from the companies has been apparently the chief source of irritation on the part of the consumers and has engendered the feeling in many instances that it is impossible to secure a reasonable settlement of a matter in dispute. Complaints by letter, by telephone and by personal application covering these questions have come to the Commission in large numbers. These cases being of an individual character, the Commission has found it unnecessary to hold formal hearings on the same, but has undertaken to adjust the dispute between the the consumer and the company.

Upon receipt of a complaint if it has any appearance of being justified and is of an urgent character, the matter complained of is taken up by telephone directly with the company complained of; a statement as to the nature of the complaint being made to the proper official with a request for a report of the facts to the Commission. If, after securing a full statement of the matter in dispute between the consumer and the company, it is shown that the consumer has reasonable ground for his complaint, the company is requested to remedy the situation. In no case in which a complaint has been considered justifiable has a company refused to accede to the request of the Commission, and the result has been that numerous complaints of long standing between consumers and the companies have been settled by the Commission.

In complaints of a more general character, such as the lack of pressure of gas or excessive pressure in a given neighborhood, the Commission has taken up the matter complained of with the company by letter and has in each case secured a remedy of the improper condition, the companies showing a spirit of willingness to rectify errors both of an individual and general character upon the request of the Commission. In only a few instances has it been necessary to have the presence of the representative of a

company before a member of the Commission in order to adjust a matter in dispute, and in no case has it been necessary for the Commission to make a formal order to secure such an adjustment. An example of this class of complaint and its treatment by the Commission is shown in the case of an institution in Brooklyn which had a number of patients. The institution had been entirely without gas for three days owing to an interruption in the street service pipe. An appeal to the gas company by the institution elicited no reply, whereupon the matter was placed before the Commission by telephone. The telephonic message was received at 4 p. m.; the company was immediately notified, and by 6 p. m. the cause of the complaint had been remedied. In a communication to the Commission the President of this institution said:

> "Two months ago this institution with twenty-six patients was without gas for three successive nights. Repeated calls on the company brought only repeated promises to attend to it. Finally I made a complaint over the telephone to your Commission, and although it was four o'clock when I telephoned, the gas company had their man there that night and the trouble was remedied. To my surprise the next morning I received an inquiry from your office to know if the matter had been attended to. I say 'surprise' because we are not accustomed to such prompt and courteous treatment in Brooklyn from public officials. Accept my thanks and that of the Board of Managers for your prompt and kind attention."

Another example of the treatment of a complaint happened in the case of a consumer who had been billed for months upon the wrong meter. Repeated complaints to the company failed to secure a rectification of the error. A complaint was filed with the Commission and the matter was taken up with the company, an investigation instituted and the matter settled to the satisfaction of the consumer, who, in acknowledging the adjustment of the dispute, wrote as follows:

> "I do not hesitate to say that this gas company has only been brought to terms through your intervention, and I beg to express my thanks to you for your kind assistance."

Gas Meter Testing.— Prior to July 1st, the State Inspector of Gas Meters had jurisdiction of the inspection and testing of gas meters. Upon that date this duty was transferred to this Commission by the Public Service Commissions Law. Under this present law no corporation or person may put in use a meter which shall not have been inspected, proved and sealed by an inspector of the Commission. Every gas company must provide suitable and proper apparatus to be approved by the Commission for testing and proving the accuracy of meters. Upon receipt of a complaint from a consumer as to the accuracy of the meter supplying his premises, the Commission must test the meter so complained of, and if it is found incorrect or defective to the prejudice of the consumer beyond two per cent., the expense of such inspection shall be borne by the corporation; otherwise by the consumer. A uniform, reasonable fee may be charged for such tests.

Immediately upon organization, in order that the important work previously performed by the State Inspector might be continued without delay, the Commission took up the subject of gas meter inspection. Upon investigation, it was ascertained that the main office of the State Inspector had been in the city of New York, that most of the work performed by him had been confined to the city, and that the expense of the office had amounted annually to approximately $23,000. An examination of the methods previously in use developed the fact that the great proportion of the meters bearing the stamp of the State Inspector had not been tested, that a few sample meters had been selected for test and an entire consignment had been approved on the basis of these tests. It was also found that the stamp affixed to the meter was so affixed as to interfere in no way with the opening and repairing of the meter, and that the system of computing the percentage of inaccuracy was wrong. These facts made it quite apparent that the system formerly in use should be abandoned and a new system adopted which would insure the inspection, testing and sealing of every meter and the use of a seal which would not allow a meter to be opened without the destruction of the seal. Accordingly the Commission adopted a wax seal, which is so placed on the lid of the meter that it is impossible to open or repair a meter, without having to reseal it before it can again

be put in use. The Commission also employed a gas engineer to investigate the systems of gas meter inspection in operation in other states and to recommend a system for adoption here. Upon the basis of his report a scheme was prepared and adopted which is outlined in the following (the full report appears as an appendix):

1. Each gas corporation shall provide and keep in or upon its premises, to be proved and stamped or marked by the Commission for testing and proving the accuracy of gas meters, two provers for each meter tester assigned to such premises, and each prover shall be equipped with thermometers, washers, connections, hose and such other appliances as may be necessary to make each prover complete in every respect and ready for use. Each gas corporation shall further provide suitable benches on which meters may be placed when being tested and sealed, and also suitable benches for holding the record-book used by the tester.

2. Each gas corporation shall provide and attach to each meter to be tested a suitable ring so placed that when filled with wax and sealed by a tester it will be impossible to open the meter without destroying the seal.

3. No prover or any other apparatus shall be used until it shall have been inspected, approved and stamped or marked by the Commission, and notice posted to this effect upon premises. All apparatus shall be inspected and approved at least once every year.

4. Any meter removed from a consumer's premises shall not be re-installed there nor installed upon the premises of any other consumer until proved and sealed by this Commission. When removed such meter shall be replaced only with a meter bearing the seal of the Commission, and no meter shall be put in use which does not bear the seal of the Commission.

5. When a consumer submits a written request to the Commission to test the meter through which gas is supplied to him, the Commission will serve written notice upon the gas corporation to remove the meter complained of to a testing station, where it will be tested by an inspector of the Commission. Said corporation shall remove such meter to a testing station within five days after the receipt of said notice. The gas corporation, at the time of such removal, shall place a meter sealed by the Commission, in the stead of the meter removed.

6. If upon a test a meter shall be found to be incorrect, the gas corporation shall cause such meter to register correctly before the same shall be sealed by an inspector of the Commission.

7. When a gas corporation submits a written request to the Commission according to the forms prescribed by it to test a meter, the Commission will authorize its removal to a testing station and will then prove it, provided a tag or label be attached or affixed to such meter giving the name and address of the person from whose premises it was removed.

The testing of gas meters was begun by this Commission upon July 15th. The Civil Service list of testers was soon exhausted and some delay was experienced pending the holding of an examination and the preparation of a new eligible list. Upon December 31, 1907, the Commission had in its employ 21 men testing upon an average over 1,000 meters a day. The men have greatly improved in efficiency and are now testing practically twice as many meters per day as in previous years.

At the inception of the work a comparatively large number of new and repaired meters were found inaccurate and were rejected. As the work has progressed the companies have shown more care in the handling of meters and the number of inaccurate meters has correspondingly decreased.

During the period from July 15th, to December 31, 1907, the Commission tested in all 127,846 meters. Of this number 44,227, or 34.6 per cent. were new meters, 82,057, or 64.2 per cent., were repaired and removed meters and 1,562, or 1.2 per cent., were complaint meters. Testing stations were in operation in the shops of 13 gas companies, and two meter manufacturing companies, the proving machines for making such tests being furnished by the companies in question, in accordance with the provisions of law. Each of these machines was tested by an inspector of the Commission by means of a standard cubic foot bottle, which had been previously standardized by the Bureau of Standards at Washington. In all 59 proving machines were tested, of which number it was necessary to reject six.

During the six months ending December 31, 1907, the Commission received 1,586 applications for tests of meters upon complaint. Of this number 1,562 were tested; 203 or 13.0 per cent.

were found to be correct; 211, or 13.5 per cent. were less than 2 per cent. fast (the limit allowed by law); 598, or over 38.3 per cent. were 2 per cent. or more fast (making 809 or 51.8 per cent. fast); and 550 or 35.2 per cent. were slow. The total percentage of all fast meters was 2,773.10, or an average of 3.43 per cent. The total percentage of slow meters was 1,592.69, or an average of 2.89 per cent.

In the matter of handling complaints of consumers as to high bills the Commission has adopted a system which insured the utmost accuracy in making tests of meters upon complaint. Upon the receipt of an application a complaint inspector is sent to the house of the applicant for the purpose of examining the meter, so as to ascertain if there is any leakage, and if the index has been properly taken. The meter is then "tagged" by the inspector as a means of identification and a notice is sent to the gas company ordering the removal of the meter for the purpose of making the test. Upon the receipt of the meter at the testing station it is allowed to remain near the testing apparatus for at least five hours so as to equalize the temperatures and is tested by an inspector of the Commission within twenty-four hours after its receipt. The result of the test is communicated to the consumer making the complaint and also to the gas company supplying the meter.

If the meter indicates an over-registration of two per cent. or more, the fee which is charged at the time of "tagging" the meter is returned to the consumer and is charged to the company. A system of fees varying in size from fifty cents for the smaller meters to $2 for the largest size is charged by the Commission for each test of a complaint meter.

Customers whose meters have indicated an over-registration of two per cent. or more are entitled to a rebate on their gas bills from the companies supplying them, varying according to the length of time that the meter has been in service. In response to a circular letter sent out by the Commission to all the gas companies within its jurisdiction for the purpose of adopting a uniform system of rebates on fast meters, it was ascertained that a majority of the companies rebate the percentage fast for the full period of time that the meter has been set, if it has been

set for a year or less, and for half the period of time if it has been set over a year. Other companies rebate for a less period of time, and it will be necessary for the Commission to order the adoption of a uniform system which will be fair both to the consumers and the companies.

The following tables show the number of new, repaired and removed meters, and the complaint meters tested during the six months ended December 31, 1907:

TABLE A.— RECORD OF GAS METERS TESTED BY THE PUBLIC SERVICE COMMISSION FROM JULY TO DECEMBER, 1907.

MONTHS.		3	5	10	20	30	45	60	80	100	150	200	250	300	Total.
July (15 days) total tested, 6,033	New	329	2,262	108	22	29	.....	.....	.....	.....	.....	.....	.....	.....	2,750
	Rep. and rem.	2,106	735	179	42	6	6	2	.....	6	4	.....	.....	.....	3,086
	Complaint	76	66	27	13	5	2	4	.....	3	.....	1	.....	.....	197
August, total tested, 18,601	New	1,998	4,539	57	19	21	13	5	.....	4	.....	1	.....	.....	6,657
	Rep. and rem.	7,810	3,111	605	169	59	46	20	.....	24	7	4	3	3	11,861
	Complaint	35	28	13	3	1	3	.....	.....	.....	.....	.....	.....	.....	83
September, total tested, 21,241	New	2,175	6,490	122	31	12	6	7	2	4	1	.....	.....	.....	8,850
	Rep. and rem.	7,980	3,295	431	295	79	44	29	.....	38	6	5	4	4	12,210
	Complaint	90	49	31	5	2	1	.....	.....	3	.....	.....	.....	.....	181
October, total tested, 28,706	New	1,685	8,822	207	58	15	19	9	.....	2	.....	.....	.....	.....	10,817
	Rep. and rem.	13,363	3,055	698	285	96	39	24	.....	32	9	10	1	9	17,621
	Complaint	116	88	39	8	4	1	3	.....	6	2	1	.....	.....	268
November, total tested, 25,375	New	1,643	5,888	94	40	32	6	5	.....	2	1	1	.....	2	7,714
	Rep. and rem.	11,886	4,045	1,025	218	59	44	18	1	20	5	4	2	6	17,333
	Complaint	147	124	31	15	3	1	1	1	4	1	.....	.....	.....	328
December, total tested, 27,890	New	2,004	5,130	179	63	9	21	19	.....	10	1	.....	.....	3	7,439
	Rep. and rem.	14,451	4,092	885	291	85	80	20	.....	29	5	6	.....	2	19,946
	Complaint	190	188	63	24	16	12	5	.....	5	.....	.....	.....	2	505
Totals	Number	68,084	52,007	4,794	1,601	533	344	171	4	192	42	33	10	31	127,846
	Per cent	53.2	40.7	3.7	1.3	.4	.3	.1	.....	.2	.....	.....	.....	.....	100

TABLE B.— NEW METERS TESTED.

MONTH.	Total correct within 2 per cent.	Total rejected.	Grand total.	Per cent. correct within 2 per cent.	Per cent. rejected.
July	2,693	57	2,750	97.9	2.1
August	6,543	114	6,657	98.3	1.7
September	8,660	190	8,850	97.8	2 2
October	10,567	250	10,817	97.6	2.4
November	7,554	160	7,714	97.9	2.1
December	7,243	196	7,439	97.3	2.7
Total	43,260	967	44,227	97.8	2.2

TABLE C.— REPAIRED AND REMOVED METERS TESTED.

MONTH.	Total correct within 2 per cent.	Total rejected.	Grand total.	Per cent. correct within 2 per cent.	Per cent. rejected.
July	2,979	107	3,086	96.5	3.5
August	11,740	121	11,861	98.9	1.1
September	12,102	108	12,210	99.0	1.0
October	17,476	145	17,621	99.2	.8
November	17,092	241	17,333	98.6	1 4
December	19,703	243	19,946	98.7	1.3
Total	81,092	965	82,057	98.8	1.2

TABLE D.— TABLE SHOWING TESTS OF METERS UPON COMPLAINT.

MONTH.	NUMBER TESTED.				TOTAL AMOUNT OF PERCENTAGE.		NUMBER FAST.				NUMBER SLOW.			
	O. K. absolutely.	Fast.	Slow	Total.	Fast.	Slow.	2–6 per cent.	6–11 per cent.	11–15 per cent.	Above 15 per cent.	2–6 per cent.	6–11 per cent.	11–15 per cent.	Above 15 per cent.
July	30	71	96	197	221.80	323.75	49	6	.....	.....	40	6	4	.....
August	9	48	26	83	168.04	87.85	35	7	.....	.....	6	6	.....	.....
September	20	94	67	181	443.68	211.81	62	7	1	1	23	7	1	1
October	40	128	100	268	432.93	280.75	71	18	2	.....	38	6	2	1
November	32	175	121	328	562.51	320.22	113	15	3	.....	42	10	.....	.....
December	72	293	140	505	944.14	368.31	171	36	1	.....	43	10	2	.....
Total	203	809	550	1,562	2,773.10	1,592.69	501	89	7	1	192	45	9	2

MONTH.	PERCENTAGES TESTED.				AVERAGE PER CENT.		AVERAGE PER CENT. FAST.				AVERAGE PER CENT. SLOW.			
	O. K. absolutely.	Fast.	Slow.	Total.	Fast.	Slow.	2–6 per cent.	6–11 per cent.	11–15 per cent.	Above 15 per cent.	2–6 per cent.	6–11 per cent.	11–15 per cent.	Above 15 per cent.
July	15.2	36.1	48.7	100	3.06	3.37	69.0	8.4	.....	.....	41.6	5.2	4.1	.....
August	10.9	57.8	31.3	100	3.50	3.38	72.9	14.6	.....	.....	23.0	23.0	.....	.....
September	11.1	51.9	37.0	100	4.72	3.16	65.9	7.4	1.1	1.1	34.3	10.4	1.5	1.5
October	14.9	47.8	37.3	100	3.38	2.80	55.4	14.0	1.5	.....	38.0	6.0	2.0	1.0
November	9.7	53.4	36.9	100	3.21	2.64	64.5	8.5	1.7	.....	34.8	8.2	.....	.....
December	14.2	58.0	27.8	100	3.22	2.63	58.3	12.3	.3	.....	30.7	7.1	1.4	.....
General average	13.0	51.8	35.2	100	3.43	2.89	61.9	11.0	.8	.1	34.9	8.1	1.6	.3

VI. ACCIDENTS AND COMPLAINTS.

The office of the Commission is kept open from 8 a. m. to 11 p. m. every day of the year, principally in order that reports of accidents may be made promptly and an inspector sent to investigate and report in all serious cases, as required by law. An engineer is also on call and a photographer may be obtained if necessary. Through this corps of men, definite information is obtained about all serious accidents, which may be made the basis of an order in case the Commission considers that one should be issued, looking toward the prevention of such accidents in the future. Nearly 300 railway accidents were investigated by the employees of the Commission between July 1st and December 31st.

Railway Accident Reports.— In the first weeks of the existence of the Commission, written reports of accidents were made in the form prescribed by the former Railroad Commissioners. The procedure as now laid down by an order of the Commission (Order No. 1) prescribes the method of reporting accidents and the classes of accidents to be reported by telephone. It requires that notice shall be given by telephone immediately after the happening of the accident (or if the accident happens between 11 p. m. and 8 a. m., then at 8 a. m. of the following day) in case it falls within one of the following classes:

1. Accident resulting in death or serious injury to persons;
2. Collision resulting in serious damage to cars;
3. Derailment of elevated or subway trains or railroad passenger trains; or
4. Serious interference with or stoppage of traffic.

The average of time between the occurrence of accidents of the sort referred to in this order and the report of them by companies to the Commission has been one hour and thirty-five minutes. This does not satisfy the requirements.

Such notice is required to be followed by a written statement addressed and mailed to the Commission, as soon as possible, or at least within three days thereafter, the written statement to contain the following information:

(a) The name of the corporation owning the road.

(b) The name of the corporation leasing or operating the road.
(c) The date and hour of the accident.
(d) The precise location of the accident.
(e) The number and description of the car involved in the accident.
(f) The names and places of residence of employees in any way connected with the occurrence.
(g) The names and addresses of passengers or other persons killed or injured.
(h) The names and residences of employees killed or injured, and the extent of the injury.
(i) The circumstances attending and the supposed cause of the accident, with the names and residences of all witnesses who saw the accident or can give any facts in reference to the same.

The order also requires a written notice of every accident of whatever character happening upon any lines of railroad within its jurisdiction, which notice must be mailed to the Commission within forty (40) days after the accident, and must consist of a classification according to their nature of all accidents, including those reported by telephone.

The statistics for the six months just passed are given in the following tables. During July the companies made reports upon the forms of the Railroad Commissioners and the returns were far from complete. This accounts for the very great difference between July and each of the other five months.

TOTAL NUMBER OF ACCIDENTS REPORTED BY RAILROAD AND STREET RAILROAD COMPANIES — JULY TO DECEMBER, 1907.

	July.	August.	September.	October.	November.	December.	Total.
Car collisions	61	146	218	221	160	216	1,022
Collisions with vehicles	14	488	652	791	977	947	5,007
Persons struck by cars	49	415	320	354			
Boarding	12	654	512	510	438	438	2,564
Alighting	39	1,276	931	593	465	435	3,739
Employees	39	735	672	603	150	363	2,562
Derailments	.....	33	23	See note.	See note.	See note.	56
Injuries on stairways	.....	26	35	See note.	See note.	See note.	61
Other accidents	26	2,098	1,839	1,794	1,847	1,594	9,198
	240	5,871	5,202	4,866	4,037	3,993	24,209
SERIOUS.							
Killed	33	49	63	47	45	51	288
Fractured skulls	6	10	11	15	12	14	68
Amputated limbs	5	10	8	9	4	5	41
Broken limbs	9	44	39	40	47	36	215
Other serious	39	92	95	80	135	94	535
	92	205	216	191	243	200	1,147

NOTE.—Under the revised form for reporting accidents, these classes of accidents were removed from this classification and treated under another heading.

ANALYSIS OF TELEPHONE REPORTS.

The following table shows the classification of the accidents as reported by telephone. It will be seen that these figures do not agree with those in the preceding table. For example, the number killed is given above as 288 and the number seriously injured as 859; in the following table these numbers are 250 and 1328, respectively. This is largely accounted for by the fact that the reports made by telephone are often more or less premature; the exact results are frequently not known at the time. Thus thirty-eight persons died after the reports were made by telephone and before the final written reports were received.

CLASSIFICATION OF ACCIDENTS REPORTED BY TELEPHONE.

	PASSENGERS.		EMPLOYEES.		OTHERS.		TOTALS.		Total killed and injured.
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	
1. Alighting	11	100	.....	7	.....	.....	11	107	118
2. Boarding	18	55	1	12	.....	1	19	68	87
3. Fell from running board	2	11	.....	3	.....	.....	2	14	16
4. Fell from cars	7	16	5	15	.....	.....	12	31	43
5. Car collisions	4	320	1	50	.....	7	5	377	382
6. Fell from stairways and platforms	3	14	1	.....	.....	.....	4	14	18
7. Jumped from cars	3	20	3	1	.....	.....	6	21	27
8. Stealing rides	.....	.....	.....	.....	5	20	5	20	25
9. Derailments	.....	23	1	7	.....	.....	1	30	31
10. Collisions with vehicles	.....	16	.....	6	8	143	8	165	173
11. Fell from El structure	.....	.....	2	1	1	1	3	2	5
12. Struck by cars	9	2	25	25	92	167	126	194	320
13. Contact with third rail	.....	.....	9	33	17	.....	26	33	59
14. Coupling and uncoupling cars	.....	.....	2	10	.....	.....	2	10	12
15. Arms projecting from windows	.....	6	.....	.....	.....	.....	.....	6	6
16. Others	4	33	15	191	1	12	20	236	256
Total	61	616	65	361	124	351	250	1,328	1,578

That 288 persons were killed and a very much larger number seriously injured in six months is an appalling fact. The Commission believes that no more important work than the saving of human life is before it and that if there is any way in which the number of deaths and injuries can be reduced, it should be adopted at once. In order that the whole matter may be thoroughly investigated and recommendations made at the earliest possible moment, a departmental Committee on Safety Devices has been formed under the following resolution:

"Resolved, That the electrical engineer, the acting head of the Bureau of Inspection, and the chief clerk of the Bureau of Accidents, constitute a subcommittee to consider safety devices and accident prevention measures. Such subcommittee to hold at least one meeting each week, and their conclusions, if approved by the chief engineer, to be reported to this Commission."

Many meetings have already been held, scores of appliances have been considered, but at the end of the year the report had not been completed.

Safety Orders.— The work of regulating the service of railroad and street railroad companies so as to render it safe, will necessarily be more effective in the future than it could have been made during the six months covered by this report. The reason is that the compilation of statistics and the careful classification of accidents as regards their cause and the responsibility therefor, must cover a period of some duration before a general remedy for a defect can be recommended. Nevertheless, final orders have been issued in a number of instances, where it was clear that the case called for a certain definite remedy.

One order issued by the Commission to increase the safety of travel related to the so-called Fort Wadsworth curve, where at midnight on August 23, 1907, a woman was jolted out of a car and killed. The details are given above (see Division III–G and Order No. 50).

Order No. 153 required the safeguarding of traffic across the Lutheran Cemetery line of the Brooklyn Union Elevated Railroad Company (Brooklyn Rapid Transit System) by the erection of gates at grade crossings, and the stationing of flagmen to give warning of the approach of trains. It has corrected, so far as

is at present possible, the condition which existed at the Forest avenue station of that line when upon August 31, 1907, a man was killed there.

Order No. 5 was passed on the complaint of W. W. Niles, representing the Automobile Club of America, against the Union Railway Company, regarding the dangerous location of trolley poles in the center of Jerome avenue, the Bronx, opposite Woodlawn cemetery. The order required the company to satisfy or answer the complaint within ten days. The company elected to satisfy the complaint, and later a communication was received from the complainant, stating that the dangerous condition had been remedied, acording to the suggestions made. This situation also was brought to notice by an accident in which two occupants of an automobile were seriously injured. The danger point was about opposite Woodlawn cemetery entrance gate, where Jerome avenue makes almost a right-angle turn. The poles south of the turn were located in the center of the roadway between the trolley tracks. A person going south on Jerome avenue from a point north of the turn had a free and unobstructed roadway, with nothing to indicate that it did not continue. He was necessarily surprised upon making the sharp turn and meeting the first of the trolley poles directly in the center of the roadway.

Reference in this connection should be made to Order No. 55, on the complaint of an inspector of the Commission, regarding the manner in which an express car was operated on October 20, 1907, at 2:35 a. m. down the steep incline on Flatbush avenue, near Malbone street, Brooklyn, with the result that the car ran wild a distance of more than 130 feet over the paving stones and collided with the curb stone and a tree, killing the motorman. The complainant alleged that the company was not enforcing its rules regarding the operation of cars on that incline, and the order required the company to satisfy or answer the complaint within ten days. The company answered that although the car which figured in the accident was undoubtedly moving too fast, the matter of operation on the incline was being carefully supervised by the company.

Investigation of an accident in which a young man was struck and killed by a train of the South Brooklyn Railway Company at

Sixteenth avenue and Culver road and of the general conditions in the neighborhood shows that platforms of an unsafe type are maintained, and that physical conditions subject passengers to unnecessary danger in boarding cars and alighting therefrom. This is one of the first matters to be taken up in 1908.

An accident recently occurred at the junction of Fulton and Prospect streets, under the Brooklyn approach to the Brooklyn bridge. In this case the trolley car became unmanageable, jumped the track at the switch, and ran with its forward trucks on one track and its rear trucks on the other, for a distance of two blocks to Front street, where it collided with a horse and wagon and came to a stop. Upon investigation, the switch referred to was found to be in defective condition, and the situation at the point in other respects dangerous. The matter was taken up by the Commission on complaint of an inspector and an order (No. 143) was adopted requiring the company to satisfy or answer within ten days. The matter was pending at the close of the year.

A hearing to determine whether the local tracks of the subway should be fully equipped with the block system or some adequate safety device system for the prevention of accidents was ordered to be held on December 12th (Order No. 121). Two hearings had been held before the end of the year. General Manager Frank Hedley of the Interborough Rapid Transit Company asserted that everything possible had been done to provide against danger from lack of care and judgment on the part of employees of the company operating subway locals. This proceeding is still pending.

Gas and Electricity Accidents.— Naturally the number of serious accidents connected with the manufacture and sale of gas and electricity is very much less than in the case of transportation companies. In response to order No. 28 requiring all gas and electric corporations within the jurisdiction of the Commission to give notice to the Commission of every accident happening upon the premises or in connection with the manufacture and distribution of gas or electricity, which resulted in loss of life or any injury to person, or any interference with the constant supply of gas or electricity to any consumer or consumers, the Commission has received 178 reports, of which 171 were injuries sustained by employees, 5 injuries to other persons and 2 killed.

VII. APPLICATIONS FOR APPROVAL.

Additional Elevated Railroad Tracks on Flatbush Avenue. — The Brooklyn Union Elevated Railroad Company has made application to this Commission for the right to construct, operate and maintain four elevated railroad tracks upon what is known as the Flatbush avenue extension, to connect on Fulton street at or near its intersection with Flatbush avenue and to extend northerly along the extension of Flatbush avenue over the elevated railroad structure of Myrtle avenue to a point distant about 100 feet north of where the northerly side of Myrtle avenue intersects the Flatbush avenue extension; also two elevated tracks connecting with the two elevated tracks on Flatbush avenue, beginning at or near a point on Flatbush avenue, distant about 350 feet southerly from its intersection with Fulton street and extending northerly under the elevated structure on Fulton street and over and above the elevated structure on Myrtle avenue along and through Flatbush avenue and the extension thereof to a point near where Nassau street is intersected by the extension of Flatbush avenue and where the extension of Flatbush avenue joins the Plaza to Manhattan bridge, the last two elevated tracks applied for to be in addition to those already on such Flatbush avenue extension and to be one on each side of the present tracks, also two elevated tracks connecting with the petitioners' elevated structure, turning out of Myrtle avenue and extending northerly along the extension of Flatbush avenue, to be constructed between the tracks last described to where the same will merge into such tracks at a point about 100 feet north of Johnson street, together with the right to construct, maintain and operate all the necessary turnouts, sidings, switches, crossovers and connections with its elevated structure on Flatbush avenue, Fulton street and Myrtle avenue and the further right to maintain signal towers, plants, equipment, platforms and stations necessary in the operation of said road.

The Commission is in receipt of requests by individuals and the local civic organizations in most instances opposing the granting of this application and requesting an opportunity to appear in opposition on any hearing which might be ordered. The date for a public hearing on the matter has not yet been determined and the matter is now pending.

Livingston Street Extension.— This application was for permission to construct and operate an extension in Brooklyn, as follows:

"Along and upon Livingston street, from Court street to Flatbush avenue; on Flatbush avenue from Livingston street to Lafayette avenue; and on Lafayette avenue from Flatbush avenue to Fulton street, by a double track street surface electric railroad to be operated by an overhead trolley system together with the necessary poles, wires and equipment with connections at Court street, Third avenue, Flatbush avenue, Lafayette and Flatbush avenues and Lafayette avenue and Fulton street with tracks of the Brooklyn City Railroad Company; at Boerum place with tracks of the Nassau Electric Railroad Company, and at Smith street with tracks of the Coney Island and Brooklyn Railroad Company."

The petition on this application was filed under date of August 8, 1907. The company had already obtained a franchise from the city authorities. A public hearing was ordered for August 12th and duly advertised. On August 12th a hearing was had and no one appeared in opposition to the petition. Testimony was taken and the facts found to be substantially as follows:

For a number of years it has been desired to widen Livingston street so that car traffic might be properly taken care of. Fulton street had become so congested as to make it practically impossible to put more cars on that street, more cars meaning a slower movement of the cars. Various devices have been tried from time to time to divert cars from Fulton street during rush hours. But the measure of relief intended to be secured by the widening of Livingston street cannot be fully realized without some means of connecting the streets with the north roadway of the bridge. At present all New York bound cars in order to get to the north roadway of the bridge are obliged to use Washington street. This causes congestion at Fulton street and Boerum place and on Washington street. The full relief to traffic on Fulton street to be afforded by the construction of tracks on Livingston street and Lafayette avenue will not be realized without some way of avoiding the necessity for the use of Washington street. This the Bridge Department has undertaken to accomplish by providing

for a connection at about the intersection of Liberty street and Fulton street over private property to an inclined structure, passing over High and Sands streets above grade and coming out on the north bridge roadway a little west of Sands street. This will enable all New York bound cars passing down Livingston street, Court street and Fulton street to reach the north roadway of the bridge without congesting traffic at Boerum place or on Washington street. On the return trip from New York a similar inclined structure over Sands and High streets will prevent congestion at these points and will enable cars to pass directly up Fulton street, Court street, Livingston street and Atlantic avenue.

The extension on Livingston street and Lafayette avenue will permit the dividing in half of the traffic which now congests Fulton street. In other words, all South Brooklyn cars, including lines operated on Flatbush avenue, Seventh avenue, Bergen street, Fifth avenue and Third avenue, can pass down either Atlantic avenue or Livingston street instead of being all crowded down and congesting Fulton street. If it is desired to remove Fulton street, Gates avenue and Putnam avenue cars from Fulton street, the cars of these lines can be diverted at Fulton street and Lafayette avenue, down Lafayette avenue and Livingston street to the Borough Hall or bridge.

The opening of the subway makes necessary some changes there, requiring these Livingston street tracks. Assuming that great numbers of people will take the subway, the main station from which they can take it will be the Borough Hall station, and presumably a large number of people will be deposited at this station, which will necessitate a movement of the cars up and down Fulton street for their proper distribution. With this extension complete a circulating system of cars can be operated down Fulton street and up Livingston street and down Lafayette avenue and up Fulton street, as the conditions of travel require.

It appeared from the testimony that the Nassau Electric Railroad Company entered into a contract with the Brooklyn Rapid Transit Company, under date of March 29th, last, by which for a period of ten years the Brooklyn Rapid Transit Company agreed to furnish such advances as may be needed, provided the Nassau Company issue its mortgage to secure these advances, as

well as to secure about $3,000,000 advance made prior to that time. That mortgage has not yet been approved by the Commission.

Upon the above allegations and the proofs presented, the Commission, being satisfied that the construction and operation of said extension as applied for was necessary and convenient for public service and that said petitioner means in good faith and has sufficient financial ability to construct and operate such extension, and after due deliberation, granted the application. (See Order No. 9.)

The extension authorized above is now in operation, and the report of the Commissioner of Bridges for the month of November states that because of it there are improved conditions as to arrival of surface cars at the Brooklyn bridge.

The Nassau Electric Railroad Company Mortgage.— The application of this company for permission to issue a mortgage to secure certificates of indebtedness not exceeding $5,000,000 was originally made to the Board of Railroad Commissioners. Two hearings were had before that Board, but no definite action was taken prior to the passage of the Public Service Commissions Act. At the request of the railroad company, the application was continued before this Commission, and the papers turned over by the Public Service Commission for the Second District. Hearings have been held on this application, and the matter is now pending.

The Brooklyn Union Elevated Railroad Mortgage.— This application was for authority to issue a mortgage covering the property of that company, to secure certificates of indebtedness issued or to be issued, not exceeding $20,000,000. Like the application of the Nassau Electric Railroad Company, it was first made to the Railroad Commissioners. Hearings were had before it, but no action was taken and the papers, exhibits and minutes of the hearings were filed with this Commission for appropriate action. The matter is now pending.

Application of the New York and Queens Electric Light and Power Company to Issue Bonds.—This company applied to the Commission for its consent to the issuance of bonds of the par value of two million dollars for the purpose of acquiring property, constructing works and the extension and improvement of its

plant and distributing system. One hearing was given, but a further hearing has been deferred from time to time, at the request of the applicant, and is now pending.

Viaduct, East One Hundred and Seventy-first Street.— Application was made for permission to carry One Hundred and Seventy-first street and St. Paul's place across the tracks of the New York and Harlem Railroad Company, by Louis F. Haffen, president of the borough of the Bronx. The New York and Harlem Railroad Company and its lessee, the New York Central and Hudson River Railroad Company approved the application, and the plans for the construction of the bridge were also approved by the city authorities and the said railroad companies. Accordingly it was:

Resolved, That this Commission determines, under section 61 of the Railroad Law, that East One Hundred and Seventy-first street and St. Paul's place, borough of the Bronx, New York city, shall cross the New York and Harlem Railroad, now leased and operated by the New York Central and Hudson River Railroad Company, above the grade of said railroad, and on an overhead bridge for foot traffic, and that the plans and statement of the expense for the construction of said bridge, submitted and approved by the chief engineer, and borough president of the borough of the Bronx on behalf of the city, and by the chief engineer of the New York Central and Hudson River Railroad Company on behalf of said company, be, and the same hereby are, approved by this Commission, and that the secretary be authorized and directed to sign the approval of said plan and statement of the expense on behalf of the Commission.

Viaduct, East One Hundred and Sixty-seventh Street.— This application from the city of New York for leave to cross the tracks of the New York and Harlem Railroad Company at East One Hundred and Sixty-seventh street in the borough of the Bronx was originally made to the Board of Railroad Commissioners in 1904, which Board gave a public hearing on October 26, 1905. There were several adjournments to permit the railroad company to be heard and in July, 1905, the company wrote the Board that it would not produce any witnesses and did not care to be further heard. On October 11, 1905, the Board of

Railroad Commissioners made its determination under section 61 of the Railroad Law granting the application for crossing the New York and Harlem Railroad at East One Hundred and Sixty-seventh street by an overhead bridge for foot passengers only, reserving the right to thereafter determine as to the height, the length, and the character of materials for the approaches and the bridge.

The city officials appear not to have understood the kind of bridge desired and when it was ascertained by the citizens who were urging the improvement that the determination of the Board of Railroad Commissioners was for a foot bridge only, they protested vigorously and demanded that it be a bridge for general traffic. After considerable correspondence and delay, the city by resolution of the local board of Morrisania made a new application for a general traffic bridge over the railroad on One Hundred and Sixty-seventh street and the Board of Railroad Commissioners gave a public hearing on new application on March 12, 1907. The railroad objected somewhat to the plans of the bridge suggested by the local authorities on the ground that they were too elaborate and the engineers of the city and of the railroad were occupied in considering plans for the proposed bridge with the purpose of reaching an agreement down to the time of the creation of this Commission.

On July 17, 1907, the papers in the matter were transmitted from the Public Service Commission for the Second District to this Commission, including all the correspondence and testimony. The matter was referred to a committee which examined estimates of cost, statements of distribution of expense, etc. The committee reported that the proposed structure was very much needed, that the estimated cost of construction amounted to about $90,000, distributed half to the city and half to be paid by the railroad company, and that the application should receive the approval of the Commission. Thereupon the Commission under the authority of section 61 of the Railroad Law determined that East One Hundred and Sixty-seventh street, borough of the Bronx, New York city, shall cross the New York and Harlem Railroad — now leased to the New York Central and Hudson River Railroad Company — above the grade of such railroad and

by an overhead bridge for general traffic and that the plans submitted were approved, and the secretary was directed and authorized to sign the approval of said plans on behalf of the Commission.

Change in Schedule Rates.— An application was made by the Long Island Railroad Company for permission to put into effect one day after publication at stations and filing with the Commission, a rate of $180 per month for the exclusive use of a club car, with a porter in charge, by the party who charters it, for six months, November 15, 1907, to May 14, 1908, inclusive, to be moved on regular trains one round trip each date, Sundays and legal holidays excluded, between Long Island City and stations on the Far Rockaway branch, viz., Far Rockaway to Hewletts, inclusive; chartering party to purchase each month thirty (30) or more commutation tickets between Long Island City or Brooklyn and the stations named on the Far Rockaway branch at rates published. The necessary permission was granted under section 29 of the statute.

On December 23 another application was made by the same company for permission to put into effect, three days after publication at stations and filing with the Commission a rate of 5 cents per 100 pounds on chicory in bags, boxes or barrels, in carloads subject to a minimum weight of 20,000 pounds per car, from Flushing, N. Y., to Long Island City, N. Y. In support of the application it was stated that the above proposed rate was in effect to Pier 32, East river, subject to a minimum weight of 15,000 pounds per car, but because of improvement being made at Pier 32, East river, by the Dock Department, very much restricting the applicant's facilities, it was necessary to determine the handling of car load traffic there. The present class rate to Long Island City is 5 cents per 100 pounds, but subject to a minimum weight of 36,000 pounds per car, and shippers were unable to load that amount in a standard car. The Commission granted this application also.

The Behr Monorail Company applied to the Commission for a franchise to operate a railroad between Atlantic avenue ferry, Brooklyn, and Coney Island. The application was originally made to the Rapid Transit Railroad Commissioners, and proposed

a line equipped by cars operated by electric motors, substantially the same as those now in use on the subway, but instead of being built to run upon two parallel railroad tracks, to be supported and run upon a single rail which forms the apex of a triangle. The base of such triangle would rest upon the ground or upon a viaduct and would have on its lateral faces guide rails to prevent the car falling over. The cars would be constructed so that the wheels on which they run would be within its body.

The application proposed that the company obtain the necessary consents of property owners, and build the railroad upon a steel viaduct or elevated road all the way. The committee of the Rapid Transit Railroad Commissioners having the matter in personal charge reported that before laying out a railroad route on the plan proposed, assurances should be required that there would be a bidder for construction, equipment and operation on sufficiently favorable terms and that as this Monorail system was covered by patents, it should be guaranteed that the owner of the patents, Mr. Behr the applicant, in case of the approval of a plan on a satisfactory route, would bid for the construction, not more than $1,000, pay expenses of procuring consents of property owners, save the city harmless from claims of damages, pay the minimum rental required by the statute and an additional sum of fifty cents a foot for every foot of single track constructed under such contract during the period of the lease for the first ten years and $1 a foot for the next ten years (the lease being for a period of twenty years with a renewal of twenty years more,) and make a deposit of $25,000 to meet the expenses of the surveys and borings necessary and to pay costs for obtaining the consents of property owners, or applying to the Supreme Court in case such consents could not be obtained. Mr. Behr was advised of the foregoing conditions and that upon receipt of such deposit the engineer and counsel would examine the modified route proposed and if found without serious objection, prepare the usual form of resolution to be submitted to the Board of Estimate and Apportionment.

A communication was received from Mr. Behr stating that the proposed terms were accepted and agreed to and that the $25,000 deposit would be made *after* the route was laid out and

approved by the Board of Estimate and Apportionment. He was advised that the deposit of $25,000 was a condition precedent to the Board's acting upon the matter, such money to be used in defraying the costs of the surveys, etc., as outlined as above. He was also informed that his $25,000 would not be returned if the contract was let to some other bidder. No deposit was made prior to the abolishing of the Board of Rapid Transit Railroad Commissioners, and no deposit has been made with this Commission, and no formal definite action taken by it.

Several communications from individuals and organizations in the Borough of Brooklyn regarding this application have been received, some warmly approving the granting of this franchise and others earnestly objecting to it. The Commission is prepared to consider favorably any plan which will insure safe rapid transit to any considerable portion of the city, which can be built without overtaxing the resources of the city, and which is according to the statute, requiring only that any such project shall have sufficient financial backing and character to insure its being carried out in accordance with the terms of the contract.

VIII. ORGANIZATION OF STAFF.

The Public Service Commissions Law transferred to this Commission all of the powers and duties of the Rapid Transit Board, and also those of the Railroad Commissioners, the Commission of Gas and Electricity and the State Inspector of Gas Meters within the area of Greater New York. The same act provided for the taking over of all the employees of the Rapid Transit Board, but none of those of the other bodies superseded. Thus upon July 1st, the Commission started with a force of 326 persons which list comprised the engineering department of the Rapid Transit Board, which was organized for the construction of rapid transit subways. Consequently this work went right along regardless of the change in the law.

For the proper execution of the other functions of the Commission — viz.: The work of the Railroad Commissioners, the Commission of Gas and Electricity and the Inspector of Gas Meters and the many, varied and important new duties imposed

relating to the regulation of corporations — no staff was provided; it had to be created, organized and instructed in the performance of its duties. Naturally, this would require much time and effort, and if the work were to be delayed until examinations could be held by the State Civil Service Commission and eligible lists established from which to make appointments, action upon many important matters would necessarily have been postponed for many weeks and perhaps months. Realizing the urgency of the situation, the Commission transferred from the Engineering Department such persons as could be spared temporarily without interfering with pressing matters and organized a bureau of inspection through which to obtain the necessary data upon which to issue orders for improvements in the service of the transportation companies. Thus the Commission was able to proceed with its new work immediately, and to issue a considerable number of orders even before the end of the summer. This arrangement was recognized to be temporary, and as fast as possible permanent bureaus were created and appointments made from civil service lists. The present organization is as follows:

Departmental Organization.— Mr. Henry B. Seaman has recently been appointed chief engineer to the Commission and has supervision of the Bureaus of Subway Construction and of Transportation. The former is practically the engineering department of the Rapid Transit Board. Its internal organization has remained unchanged and its work is carried on under nine divisions. Divisions 1 to 5 have immediate charge of construction work on various sections of construction now under way. The division of design is responsible for the preparation of the general plans and detailed plans of the rapid transit roads. The division of stations is responsible for the preparation of detailed plans of stations and supervision of the carrying out of these plans. The division of sewers has charge of the care and reconstruction of sewers along the line of rapid transit roads. The division of material under a division engineer with headquarters at Pittsburg, Pa., concerns itself with the inspection of all steel and other material used in subway construction.

The public is apparently not aware of the enormous amount

of detailed work done by the engineering department in the matter of subways. All plans are worked out in detail preparatory to the letting of contracts and after a contract is let, all work is carefully watched by employees of the Commission. All steel and cement and other materials ordered by contractors are carefully inspected and tested to make sure that they come up to the standard. The lines in every particular are given by engineers of the Commission, so that there can be no controversies as to the exact placing of subways in public streets. No portion of the work done on the subway systems of New York city is without the actual personal supervision of subordinates of the Commission.

Transportation Bureau.— This bureau is composed of three divisions: Equipment inspection, transit inspection and accidents. The first is in charge of the electrical engineer of the Commission with a corps of electrical engineers, civil engineers, a mechanical engineer and an inspector of locomotive boilers. This bureau has charge of the inspection of the cars, tracks, car barns, power houses and other property of the companies within this district. The character of the work done by this bureau is best illustrated by the investigation it has made of the equipment of the surface lines in Manhattan, a summary of which appears elsewhere in this report. The bureau has also made an inspection of the equipment of the Richmond roads, and is now engaged upon the Union Railway in the Bronx, the Coney Island and Brooklyn Railroad Company, and the whole Brooklyn Rapid Transit System. It is also investigating the question of electrolysis, and a method of testing electric meters.

The division of transit inspection consists of an engineer, three assistant engineers, several clerks and about forty inspectors, with opportunity to borrow men from the other departments for large inspections. It is the duty of this division to make investigations and inspections of the actual condition of traffic on the various lines within this district, and this is done in every case preliminary to issuing an order requiring increase in service. All of the orders of the Commission so far issued requiring increase in the service, were made upon the motion of the Commission and the facts in accord with which they were issued were furnished by this division.

During the past six months it has made the following large inspections, not to mention the many smaller ones:

The traffic on the Brooklyn bridge, a twenty-four hour inspection for seven days, requiring about one hundred men.

An inspection requiring over one hundred and twenty men made in co-operation with the employees of the Interborough Rapid Transit Company of the travel on the subway and on the four elevated lines in Manhattan. This inspection covered three days in the middle of August. An inspection was again made in the middle of November, in order to get a comparison between August and November, with the results as set forth elsewhere.

An inspection of the Broadway, the Madison and Fourth avenue and other Manhattan surface lines, including a 24-hour inspection on each of some twenty streets, to determine whether there was any actual service rendered on those tracks.

An inspection of the entire service in Richmond county, comprising the two steam railroad lines and the two street surface lines.

An inspection of the service of the important elevated lines in Brooklyn, and on several of the surface lines where complaint was made that the company was running cars at infrequent intervals.

Observations upon the service of the Union Railway on its important lines, and of the New York City Interborough Company.

The accident division receives reports of accidents, makes investigations of important cases and in co-operation with the other divisions is now considering safety devices to prevent the large number of accidents.

The Bureau of Gas and Electricity is in general charge of a secretary, who has the immediate handling of complaints against gas and electric companies, and has general charge of the testing of gas meters, with from twenty to twenty-five gas testers under his direction. Owing to the issuance of an injunction restraining the Commission from enforcing the law, the Commission has not yet undertaken an investigation of gas and electric matters, and it has, therefore, as yet made no appointments of gas engineers or of electric lighting engineers.

The Law Department is organized under the counsel to the Commission, with the usual staff of assistant and junior assistant counsels, law clerks and other employees. This department has an enormous amount of work. In connection with rapid transit work it has to prepare the contracts, institute proceedings for condemnation or purchase of real estate, interpret contracts for subway construction, render opinions upon all legal matters and present the evidence collected upon all orders or at hearings.

The Bureau of Statistics and Accounts has a title which is self-explanatory. Its work includes the compilation, classification and analysis of the annual reports of the companies, the examination of their accounts and records, and the handling of statistical and accounting work connected with all investigations. A subsequent volume contains the statistics for the year ending June 30, 1907.

The Bureau of Franchises has only recently been organized, but has already accumulated a very large proportion of the franchise documents held by the corporations in Greater New York. This bureau will soon become the most complete source of information of this sort. Its function is also to ascertain whether the laws are being obeyed, and to report upon all new grants of authority.

Secretary's Office.— In addition to these various bureaus, the Commission naturally has a large staff of clerks and stenographers under the general charge of the secretary, through whom the correspondence and administrative work of the Commission is conducted.

Offices.— Upon assuming office, the Commission obtained possession of the rooms theretofore occupied by the Rapid Transit Commission at No. 320 Broadway, where there was available about 7,000 square feet occupied by the engineering department and about 400 square feet occupied by the general office. These quarters were so cramped that on the 1st of September, the Commission moved to the Tribune building, No. 154 Nassau street, where is occupies about 25,000 square feet of floor space.

Fees Paid to the City.— According to the law the Commission shall charge certain fees which shall belong to the city of New York and shall be paid into its treasury to the credit of the general

fund accompanied by detailed statement thereof. The total amount for the last six months is as follows:

Received from officers of the Rapid Transit Commission, being amounts collected by them prior to July 1, 1907, for the sale of contracts, etc. . . .	$368 05
Net fees received from State Inspector of Gas Meters	15 15
For copies of papers and records of the Commission	128 14
Fees collected for tests of gas meters, from complainants and from gas companies	479 75
Total	$991 09

Condemnation Expenses.— Cognizant of the enormous expense to the city arising through condemnation proceedings for the acquisition of real estate or easements necessary in connection with building rapid transit routes, the Commission has endeavored to lessen such cost. When land must be acquired, it has endeavored to purchase the same at private sale rather than cause expensive condemnation proceedings to be instituted wherever a saving in money would result. It has been fairly successful.

It has also taken steps to indicate to the corporation counsel, who conducts such proceedings on behalf of the Commission, that it is the urgent desire of this Commission that the expenses be kept as low as possible and that where no work was done no fees or payments be allowed.

Meetings.— Section 10 provides that the Commission shall hold a stated meeting at least once a month in its office. The business necessary to be transacted has been so enormous that 104 stated meetings have been held in six months. In addition, there has been almost without exception a meeting of the Committee of the Whole on every business day to discuss matters of importance. Further, a large number of informal conferences between one or more of the Commissioners and representatives of companies and committees of citizens have been held. Besides these, the Commission has given twelve general hearings where citizens might appear to offer criticism of transit conditions or make suggestions as to improvements.

Except in extraordinary cases, it has been the policy of the Commission to designate one Commissioner to take testimony, and upon his report of the evidence, to issue a final order. Only by the adoption of such a procedure, which was provided for by the provisions of the act, would it have been possible for the Commission to handle in any measure the great number of proceedings it has held.

Minutes of the Commission.— The Commission has not deemed it necessary to include in this report a full account of its proceedings in view of the fact that its minutes are being printed in full in the *City Record* and will appear in bound form. Copies will be deposited in the Senate and Senate library and in the State library.

Expenses of the Commission.— The Legislature provided for the use of this Commission $150,000, of which $91,000 was for the payment of the salaries of the five Commissioners, its counsel and secretary, which were fixed by the act creating the Commission. By section 14 of the act it is provided that all other salaries and expenses of this Commission, other than the salaries of the Commissioners, its counsel and secretary, shall be paid by the city of New York. The remainder of $59,000 of the State appropriation has, therefore, been unavailable for use by this Commission.

Section 14 of the act also provides that the money required of the city shall be obtained in a manner identical with that formerly prescribed for the Rapid Transit Commission, and is as follows: This Commission may make requisition upon the Board of Estimate and Apportionment from time to time for an appropriation requisite and necessary to enable it to carry on its duties. In case the Board of Estimate and Apportionment fails to make such appropriation, the Commission is then authorized to apply to the Appellate Division of the First Department, on notice to the Board of Estimate and Apportionment, to determine what amount shall be appropriated and the decision of the Appellate Division will be final and conclusive.

The same section says that the remainder of any appropriation made by the Board of Estimate and Apportionment for the Board of Rapid Transit Railroad Commissioners shall be transferred to

the credit of this Commission, and that if the said appropriation shall not be sufficient, the Comptroller of the city is then authorized and directed to issue and sell revenue bonds of the city. It appeared that the Rapid Transit Commission had made requisition upon the Board of Estimate and Apportionment for the sum of $826,500, to pay its expenses during the year 1907, and that the Board of Estimate and Apportionment had appropriated $742,500. This Commission found on assuming office that of this sum there was available a little under $400,000 with certain outstanding bills incurred by the Rapid Transit Commission, which this Commission has from time to time audited and directed to be paid.

In November, 1907, this Commission found it necessary to make requisition upon the Board of Estimate and Apportionment for an additional appropriation to pay the remaining expense of the Commission for the year 1907. In addition to asking for the $84,000 which the Rapid Transit Commission had asked for and had not obtained upon its requisition made in December, 1906, and in addition to the sum of $12,241.64 asked for in order to pay the salaries of the Rapid Transit Commissioners for the first six months, the same not being included in its requisition upon the Board of Estimate and Apportionment, this Commission asked for $25,000 to pay the expenses of additional bureaus and additional work required under the provisions of the Public Service Commissions act. It will thus be seen that this Commission has needed for the past six months only $25,000 more than the Rapid Transit Commission had deemed necessary for its appropriation during the year. In view of the very much larger field of action of this Commission, this small increase would have been wholly inadequate had it not been for the extreme economy practiced and the difficulty of organizing the staff of the Commission as rapidly as desired.

The total expenditures of the Rapid Transit Board from June 18, 1894, to June 30, 1907, and of the Public Service Commission are given in the following table.

SUMMARY OF DISBURSEMENTS — 1894–1907.

	General fund (administrative expenses).	Manhattan–Bronx Subway construction fund.	Brooklyn–Manhattan Subway construction fund.	Bridge Subway loop (Manhattan) construction fund.	Total.
Total amount disbursed by the Board of Rapid Transit Railroad Commissioners from June 18, 1894, to June 30, 1907	$4,520,753 55	$46,774,795 13	$2,690,255 22	.....	$53,985,803 90
Total amount disbursed by the Public Service Commission for the First District (N. Y.) from July 1, 1907, to December 31, 1907	400,469 17	482,679 67	233,924 69	$588,165 29	1,705,238 82
Total	$4,921,222 72	$47,257,474 80	$2,924,179 91	$588,165 29	$55,691,042 72

During the first six months of 1907, the Rapid Transit Board expended $460,734.55, not including $12,241.64 in salaries, which had accrued but which had not been paid. During the last six months of the year this Commission expended $400,469.17 which was paid by the city, and $44,892.45, salaries to members of the Commission, secretary and counsel, which were paid by the State. The following table contains the items in detail:

COMPARATIVE STATEMENT SHOWING THE DISBURSEMENTS FROM THE GENERAL FUND FOR THE SIX MONTHS ENDING JUNE 30, 1907, AND THE SIX MONTHS ENDING DECEMBER 31, 1907.

ITEM.	Six months ending June 30, 1907.	Six months ending December 31, 1907.
Compensation of Public Service Commission, secretary and counsel	.....	$44,892 45
Compensation of Rapid Transit Board	$26,667 00	$12,241 64
Salaries	271,115 38	302,686 51
Office and telephone rentals	11,127 54	21,044 76
Stationery, printing and supplies	15,076 63	6,869 97
Postage	46 00	369 50
Furniture and fixtures	435 57	15,699 10
Telegraph service	51 33	24 03
Lighting	41 23	6 58
Janitor service	306 00	296 00
Engineering instruments and supplies	3,369 22	2,248 00
Maps, plans, prints and photo supplies	2,044 64	1,461 39
Disbursements (traveling and petty expenses)	2,009 02	3,111 83
Stenography and typewriting	.....	102 70
Inspection tests and analyses	668 22	431 71
Borings and soundings	336 00	322 67
Architectural services and disbursements	2,650 22	320 50
Consulting electrical engineers, services	625 00	725 00
Consulting sanitary expert, services, etc	1,000 00	.....
Surveying	75 00	.....
Advertising	24,087 00	127 20
Real estate search and appraisal	10,967 50	860 83
Special commissions	32,142 43	.....
Counsel	19,494 24	.....
Additional work	29,216 73	.....
Consulting refrigerating expert services	1,099 44	.....
Consulting engineers' services	5,000 00	.....
Investigations and hearings	.....	22,017 68
Special counsel fee disbursements	.....	6,038 80
Books and periodicals	.....	707 55
Filter and toilet service	414 17	346 02
Sundry contingent expenses	669 04	2,409 20
Grand Total	$460,734 55	$400,469 17

An examination of the above statement shows that for certain items, such as furniture and fixtures and office rentals, the expenditures of this Commission exceeded those of the Rapid Transit Board. This is also true of salaries, where an increase is accounted for by the very much larger staff made necessary by

the additional powers conferred by the act which the Rapid Transit Board did not possess. These expenditures were offset by the disbursements for advertising and real estate appraisals, due to the new subway routes which were put up for public letting in the early part of the year but for which no bid was received. The payments to counsel very much exceeded in the first half of the year the disbursements for investigations and hearings held in the last half. The final result was that after deducting the salaries of the Rapid Transit Board which had accrued prior to July 1st but which were not paid before that date, and adding the salaries of the principal officials of the Public Service Commission, the expenditures of the Rapid Transit Board during the first half of 1907 exceeded by about $30,000 the expenditures of the Public Service Commission during the last half of the year. This is especially interesting in view of the fact that the number of employees and the work performed was very much larger in the last half than in the first half of the year.

Recognizing the need of a proper system of accounts, and believing that every public office should be so conducted that any citizen may ascertain how every amount is expended, and that the reports should be in such a form that any one may understand them, the Commission employed Mr. John R. MacNeille to revise the methods heretofore in use and to prepare an accurate and scientific system. This has been done and it will be put into effect in 1908.

Expenses of 1908.—For its expenses during the year 1908, this Commission, under date of December 2d, made requisition upon the Board of Estimate and Apportionment for an appropriation of $1,095,000. In its communication to the Board of Estimate and Apportionment making such requisition, this Commission stated:

"Under the provisions of chapter 429 of the Laws of 1907, the late Board of Rapid Transit Railroad Commissioners was abolished and went out of office, and this Commission appointed under the provisions of the said act has been vested thereby with all powers and duties of the said Board of Rapid Transit Rail-

road Commissioners and as to the territory defined in said act and included generally in the counties of New York, Kings, Queens, and Richmond, with the former powers and duties of the Board of Railroad Commissioners of the State of New York, the Commission of Gas and Electricity of the State of New York, and the Inspector of Gas Meters of the State of New York. Besides the powers and duties of such prior existing boards, commissions and officers, new duties of a far reaching character affecting railroads, common carriers, gas and electric corporations, in respect of their service as public service corporations under the law and under their charters, and in respect of their capitalization and authority to exercise the franchises heretofore conferred or hereafter granted, have been vested in the said Commission for the First District to be exercised within the territory aforesaid.

"In the exercise of the powers and duties of the late Board of Rapid Transit Railroad Commissioners of the city of New York, the Commission is now seeing to the proper execution of the contracts for the construction and operation of a subway railroad made with John B. McDonald for the Manhattan-Bronx subway and its extensions, including the important alterations and additional tracks at Ninety-sixth street, a contract with the Rapid Transit Subway Construction Company for the Brooklyn-Manhattan subway, including a tunnel from the Battery to Brooklyn, the Brooklyn Loop contracts for a connection between the bridges in Manhattan intended to relieve the bridge congestion, and new contracts for the construction of a subway railroad in Brooklyn from the Manhattan bridge by way of Fourth avenue to South Brooklyn, have been directed by you to be made and are soon to be advertised and let subject to your approval and the construction begun. The appropriation required in 1907 for the then expected work by the Board of Rapid Transit Railroad Commissioners was under requisition dated December 27, 1906, the sum of $826,500. The Board of Estimate and Apportionment deducted $84,000, and under this requisition appropriated only the sum of $742,500. This amount for the expenses of the Board of Rapid Transit Railroad Commissioners from January 1st to July 1st, 1907, and for the expenses of the Public Service Commission for the First District from July 1st to December 31, 1907,

has been found to be insufficient, and a further appropriation to make up the amount of that deduction and to cover further items, making in all $121,000 for the rest of the year ending December 31, 1907, was transmitted to you under date of November 18th last, making a total for 1907 of $863,500.

"In addition to the powers and duties as to uncompleted work and new work under the Rapid Transit Act, the exercise of the new and additional powers under the Public Service Commissions Law with reference to railroads, common carriers, gas and electric companies, their capitalization, service and rates, and the inspection of gas meters, have made investigations and orders necessary to the proper supervision and control of said corporations, and like investigations and orders will be requisite during the coming year, as well as actions and proceedings in the courts. These are new and additional expenses not anticipated in the work of the late Board of Rapid Transit Railroad Commissioners, and for these reasons an additional amount will be required. The salaries of the members of this Commission, their counsel and their secretary are paid by the State of New York, and are not included in this requisition.

"The Public Service Commission for the First District, therefore, makes requisition, in accordance with the statutes above mentioned and under the said resolution passed, for the sum of one million and ninety-five thousand dollars ($1,095,000) to cover its necessary and requisite estimated expenses for the year ending December 31, 1908, for the purposes specified as aforesaid."

This communication was referred by the Board of Estimate and Apportionment to the Comptroller for investigation and report, and had not been definitely acted upon by the Comptroller at the close of the year. But an appropriation of $200,000 had been made to defray the expenditures accruing until definite report could be prepared and acted upon.

Respectfully submitted,

WM. R. WILLCOX, *Chairman.*
WM. McCARROLL,
EDWARD M. BASSETT,
MILO R. MALTBIE,
JOHN E. EUSTIS,
Commissioners.

APPENDIX A.

REPORT OF GEORGE S. RICE, CHIEF ENGINEER, RAPID TRANSIT RAILROAD COMMISSIONERS, ON RAPID TRANSIT MATTERS.

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NEW YORK, *June* 30, 1907.

ALEXANDER E. ORR, *President, Board of Rapid Transit Railroad Commissioners, City of New York:*

SIR.— I have the honor to present to you a report upon the work done under the supervision of the engineering department of the Rapid Transit Board for the last six months of the Board's existence, namely, from January 1 to June 30, 1907, inclusive, being superseded by the Public Service Commission for the first district from July 1, 1907, by act of the Legislature taking effect on that date.

CONTRACT No. 1.

Work on this contract, known as the Manhattan-Bronx Railroad, was practically completed at the end of 1906, and almost in full operation since it was first opened to the public, from City Hall to the One Hundred and Forty-fifth street station on the west side branch, on October 27, 1904, the remaining sections having subsequently been operated as fast as construction would permit, until now this railroad, for practically its entire length, is and has been for some time in continuous operation; such unfinished work requiring to be done being minor details of construction and pertaining more to station finish work on sections in the upper part of Manhattan and in the Bronx, as given in detail below.

On the east side branch no change has been made in the construction work as far as operation is concerned, the trains operating to the northern terminus at One Hundred and Eightieth street. On the west side branch, at the end of the year 1906, trains were being operated north to a temporary station at Two Hundred and Twenty-first street and Broadway, but the Two Hundred and Seventh street station had not been opened for operation. During the six months ending June 30, 1907, the new bridge over the Harlem Ship Canal on Broadway was opened for operation, trains running to the Two Hundred and Twenty-fifth street station beginning Monday, January 14. On Sunday, January 27, the running of trains was begun north to a temporary station at Two Hundred and Thirtieth street. The Two Hundred and Seventh street station was opened for operation on April 1, 1907.

There is still some track to be laid at the northerly end of section 15, which track cannot be completed until the temporary station at Two Hundred and Thirtieth street is removed.

The following are the specific sections of the work requiring final completion, construction on which has been continued during the six months ending June 30, 1907.

Section 9-B.—From the centre line of Gerard avenue to the west building line of Brook avenue and Westchester avenue.

At Mott avenue station a small amount of station finish work has been done, the treatment of the surface of the station arch in order to stop leakage, was carried on at intervals, requiring but little more work to be done with the exception of the painting of the interior surface of the station arch. Some changes were made in the elevator shafts to enable the elevators to operate to the lower landing.

Plans are nearly completed, and work is about to commence, to provide additional stairway facilities at the Third avenue station, necessitated by the widening of Third avenue which the municipal authorities have caused to be done near the intersection of One Hundred and Forty-ninth street.

At the Gerard street approach the concrete fence on the retaining walls was completed.

Sections 13 and 14.—From the north building line of One Hundred and Thirty-third street to Hillside avenue, at Fort George.

At the One Hundred and Sixty-eighth street station the wrought-iron grille work around the elevators, and the wrought-iron shaft stair-rail have been completed; also the work of repairing some of the face brick of the station arch damaged by fire in March, 1905. Some changes were made in the elevator shaft to enable the elevators to be operated to the lower platform. The painting of the shaft concrete remains to be done.

The One Hundred and Eighty-first street station is complete, except a very small amount of repair work on the brick, and the work of painting the shaft concrete. Changes were made in the elevator shaft to enable the elevators to be operated to the lower platform.

The Dyckman street station was practically completed December 31, 1906. During the period from January 1 to June 30, oak storm booths have been put in the station at the foot of each stairway, and the entrances to the booths along Hillside avenue have been inclosed with oak panel work.

The location of this station has necessitated changing the line of St. Nicholas avenue, and grading Hillside avenue, which work is to be done by the Bureau of Highways. This change of the streets involves the changing of a 2′ 4″ x 3′ 6″ brick sewer and a 6″ gas main, plans for which have been made and approved, and work will be started to effect these changes as soon as the Bureau of Highways does its portion of the work of changing the streets.

Section 15.—Viaduct from Fort George northerly to The Bronx at Kingsbridge.

During the past six months steel work was erected to the end of section 15. The stations at Two Hundred and Seventh street, and Two Hundred and Twenty-fifth street, and the temporary station at Two Hundred and Thirtieth street, were put in operation as mentioned above. The station finish work, however, has not yet been completed at the Two Hundred and Twenty-fifth street station.

At the Harlem Ship Canal bridge some concrete reinforcements were put in on the pier at the latch girders. There are still some minor details to be adjusted in connection with the bridge. The street surface cars were also put in operation across Ship Canal bridge beginning about the middle of April, 1907.

Van Cortlandt Park Extension.— From Two Hundred and Thirtieth street, near Spuyten Duyvil creek, to Two Hundred and Forty-second street and Broadway.

Work on this extension was started on December 1, 1906, and it was thought that sufficient headway could be made in its prosecution to have it completed and trains operated by the summer of 1907. The extremely cold and long winter of last season, however, retarded the construction of this section, as but little work could be done during the months of January, February and March. Good progress, however, was made as soon as weather conditions favored.

The foundations for this elevated structure have now been completed from Two Hundred and Thirtieth street to Two Hundred and Thirty-fifth street, and the piers built to about Two Hundred and Thirty-seventh street. For a considerable distance it has been found necessary to drive piles for the foundations where crossing swampy ground, making the work necessarily intricate to handle, and slow to perform on account of pumping having constantly to be resorted to. The close proximity of the structure to the large brick sewer in Broadway has also somewhat interfered with rapid progress.

The steel for the main structure has been erected as far as Two Hundred and Thirty-third street, and the laying of the deck for the track has been begun.

Owing to changes being made by the Highway Department in the borough of The Bronx in the street layouts, work will necessarily be delayed on the columns for the Two Hundred and Thirty-first and the Two Hundred and Thirty-eighth street stations until the contractor can have access to those portions of the street. It is expected that the Board of Estimate and Apportionment will shortly act on the proposed change of plans for the streets, when this work can be taken in hand.

Work will be prosecuted to have this branch of the road operated to Van Cortlandt Park at the very earliest date, which has been the intention since construction was first started on this extension.

The following table gives, under the captions noted, the chief items of work done for which the contractor has been paid, from the beginning of construction to June 30, 1907, inclusive. That designated "regular" is for work within the neat structural lines; while items specifically ordered by the Board come under the head of "extra" work.

	Regular.	Extra.	Total.
Earth excavation, cubic yards	1,947,530	162,090	2,109,620
Rock excavation, cubic yards	836,641	77,763	914,404
Tunneling, cubic yards	365,457	13,834	379,291
Concrete masonry, cubic yards	530,498	51,428	581,926
Brick masonry, cubic yards	28,628	2,500	29,128
Cut stone masonry, cubic yards	1,782	39	1,821
Steel erected, tons	62,698	11,955	74,653
Cast-iron erected, tons	3,897	535	4,432
Track laid, linear feet	299,855	34,779	334,634

The total amount of money expended, on account of both regular and extra work done to June 30, 1907, approved on vouchers, has been as follows:

	1900.	1901.	1902.	1903.
Regular work	$1,685,000	$10,343,000	$11,436,000	$6,930,000 00
Extra work	.....	162,000	631,000	2,563,021 47
Total	$1,685,000	$10,505,000	$12,067,000	$9,493,021 47

	1904.	1905.	1906.	Jan. 1 to June 30, 1907.
Regular work	$3,220,000 00	$869,000 00	.....	.....
Extra work	932,304 61	4,950 00	$6,000 00	$759,211 96
Total	$4,152,304 61	$873,950 00	$6,000 00	$759,211 96

Regular work, total	$34,483,000 00
Extra work, total	5,058,488 04
Total	$39,541,488 04

CONTRACT NO. 2.

Following is the progress made during the six months of 1907 ending June 30, on that portion of Contract No. 2, Brooklyn-Manhattan railroad, which still remains to be completed, consisting of the East river tunnel and sections in Brooklyn. The Manhattan end of this contract was about totally completed by the end of 1905, and for some time before that in operation from the Postoffice to Bowling Green station, and to South Ferry station, the end of the Manhattan section, since July 10, 1905. A portion of Battery Park at this date remains occupied by materials to be used in completing the river tunnels, but elsewhere the surface has been restored to as near its original condition as possible. In addition to the trees planted last year, a number of others were set out this spring to replace those destroyed by the work on the Battery Park loop, comprising the double-track structure under Battery Park.

Section 2-A.— South Ferry to Brooklyn, Joralemon street to Clinton street.

At the beginning of the year there remained a distance of five hundred and sixty-six feet to be driven between the headings of the south tube. Rapid progress was maintained from this time on until the meeting of the shields on March 1, which completed the tunneling work on this section. As in the case of the north tube headings, which met during the previous December, the lines and grades laid down in each heading for the guidance of the contractor by the engineering corps of the Board were compared and proved to agree within a margin of error so small as to be entirely negligible.

The progress made in tunneling between April 9, 1903, when the first heading was started at South Ferry, and March 1, 1907, when the last headings were joined, is summarized by years as follows:

LOCATION.	During 1903.	During 1904.	During 1905.	During 1906.	During 1907.	Total to Date.
	Feet.	*Feet.*	*Feet.*	*Feet.*	*Feet.*	*Feet.*
Manhattan, North Heading.....	311	1,139	848	612	.....	2,910
Manhattan, South Heading.....	313	1,121	830	457	269	2,990
Brooklyn, North Heading.....	607	1,266	1,285	704	.....	3,862
Brooklyn, South Heading.....	699	775	1,159	865	297	3,795
Totals.....	1,930	4,301	4,122	2,638	566	13,557

The material penetrated by all headings was rock wholly or in part for 6,070 feet of the total distance of 13,557 feet in both tubes. The remaining distance of 7,487 feet was nearly all in sand of varying degrees of fineness.

The work of correcting the deviations of the Brooklyn tubes, which deviations were caused by the contractor's faulty control of the shields as described in the 1905 report, was finished in May, shortly after tunneling operations were completed. The method adopted was simple, and consisted generally of removing the cast-iron segments in the lower half of the tunnel section and replacing them with new segments curved to an elliptical outline

so as to give more interior space at the bottom. For a short stretch in each tube near Hicks street, where the most marked variations occurred the upper half of the tunnel lining was forced outward and upward by heavy hydraulic pressure sufficiently far into the surrounding soil to permit the construction of a new masonry roof providing increased clearance. The total length of tunnel reconstructed is 2,919 feet, of which 1,957 feet are in the north tube, and 962 feet in the south tube. The time occupied by the work was thirteen months; and this, as well as the cost, was considerably less than for any other method suggested. The principal advantage of the particular method followed, however, was found in the fact that the regular work of finishing the tunnel was not materially interfered with in the meantime.

Those portions of the tubes where undue flattening or other defects occurred as a result of settlement have been largely remedied by the process of reconstruction; and at all points it is found practicable to strengthen doubtful sections to such an extent that they will become relatively the strongest parts of the tubes. This latter work is now in progress.

Considerable difficulty has been experienced in making certain sections of the tubes watertight before lining them with concrete. This is particularly the case where the tubes pass through two beds of extremely fine sand, each about 800 feet long, which show on the boring profile, included in the original contract drawings, as occcurring on either side of the rock formation encountered on the Brooklyn side. This material exhibits a marked tendency to run in through leaks in the lining, even though the openings are very small, and this in turn produces a slight settlement of the tube in the vicinity. There is no reason, however, to doubt that the efforts now being made by the contractor will prove successful in providing the absolute watertightness guaranteed by the terms of the contract, so far as future settlement is concerned.

The matter of the stability of the above described material under the loads that will be brought upon it from the operation of trains having been questioned by the officials of the Rapid Transit Subway Construction Company, it was considered advisable by them to provide some auxiliary means of support, such as piles reaching to rock or hard material, at intervals under the tubes where they pass through the fine sand. This view was not concurred in by your engineer, but as the cost of the piles could not properly be a charge against the tunnel work, and as experiments showed that they might be driven rapidly without materially delaying completion, no objection was made, and the work was allowed to proceed. At the present time nearly half the piles have been driven, and it is expected to finish the remainder during July.

In passing it may be remarked that material of this character is depended upon for a foundation under many of the high buildings in the lower part of the city, where the loads per square foot are many times in excess of any load that can be brought upon the tunnel. Nor is its action under similar conditions unknown, as it constitutes a foundation for the subway structure in lower Broadway and Battery Park, through which trains have been operating for two years without developing any defects.

It having been recognized early in the work that suitable means of ventilation must be provided for the river tunnels, sites for permanent shafts were chosen at the location fixed upon for working shafts at South Ferry and at

the foot of Joralemon street, Brooklyn. Because of the depth of ground water at the latter place and the probability of the construction at that point interfering with the regular use of the working shafts, it was deemed advisable to select another site further up the street. After three new locations were chosen and abandoned because of the opposition of property owners along the street, a site was finally secured between Hicks street and Willow place, opposite No. 60 Joralemon street. The building at that number was purchased by the contractor and will be altered to serve as an intake and outlet for the air in the tunnel. At present both shafts, the one at South Ferry and the one in Joralemon street, are under construction.

Section 3.— Clinton street, Fulton street, and Flatbush avenue to Atlantic avenue.

Work on this section at the beginning of the year had been in progress two years and nine months. Much of this time, however, was lost on account of the change of plan from a two-track to a four-track structure and work on the latter basis had been in progress only a year and three months. In general, it may be said that the work done prior to the change in plan has operated to retard progress rather than to increase it, by reason of the time required to alter the original structure and underpin it where new tracks adjoin it at a lower level. Slow deliveries of steel also continued to hamper the work until early in the present year, when all shipments of the material were received.

In Joralemon street the structure had been completed and surface damage repaired, as noted in the last annual report. The walls and ceiling have since been finished with waterproofing cement, a section of track laid, and signaling apparatus installed. The interior finish of the Borough Hall station is practically complete.

Except near the turn into Flatbush avenue, little remains to be done in Fulton street. In this locality the work is exceptionally difficult on account of the necessity for supporting the two elevated structures and surface-car tracks while carrying on the construction under cover and excavating below ground-water level for the lower track crossing the spur for the Manhattan bridge connection. It has been necessary to maintain the shaft at DeKalb avenue to handle the excavation at this point. The wings of the Hoyt street station were built early in the year, and the interior finish is well advanced.

On Flatbush avenue favorable progress was made between Livingston and State streets. Extensive pipe changes have to be made before the street can be restored to its normal condition. Considerable excavation remains at the site of the Atlantic avenue station, where construction has been delayed by the slow deliveries of steel. At the Nevins street station, where work was delayed for the same reason, good progress is now being made.

The methods in use by the sub-contractors for handling and removing excavated material and temporarily supporting the elevated structure remain the same as described in previous reports and have been found altogether satisfactory. It has been necessary to continue in service the shafts at DeKalb avenue, Lafayette avenue and Livingston street. The shaft at Borough Hall was discontinued early in the year, when the structural portion of the station at that point was completed.

The important and difficult task of underpinning the piers of the buildings adjoining the subway was completed in May. At each of the four stations, and for the greater part of the length of the depressed track connections, the subway excavation is close up to and below the foundations of front walls of buildings. In order to avoid damage by settlement it was necessary to underpin these in nearly every instance, and in many cases to carry the underpinning piers of concrete below the level at which water would stand in the soil. This was accomplished by temporarily supporting the piers on double I-beam girders running parallel to the building lines, thus transferring their loads to new bearings carefully wedged up on either side; after which rectangular sheeted pits were excavated below the original foundations to the required depth and filled with concrete, leaving the sheeting in place. Where the pits were dug below the level of ground water, interlocking steel sheeting was used for the bottom length of about six feet, and the water level was lowered by careful pumping as much as was required to finish the excavation and place the concrete. In all these operations the greatest skill had to be exercised to prevent incipient movement of the surrounding soil, and the sub-contractor's efforts in this direction proved successful.

The chief items for both regular and extra work on each section of Contract No. 2, for which the contractor has been paid from the beginning of construction to June 30, 1907, are given in the following table:

Subway Construction under Flatbush Avenue in Brooklyn.

ITEM.	REGULAR WORK.				EXTRA WORK.			Totals, regular and extra work.
	Previously reported.	Done during 1905.	Done during 1906.	Done Jan. 1 to June 30, 1907.	Done during 1905.	Done during 1906.	Done Jan. 1 to June 30, 1907.	
Earth excavation, cubic yards	214,588	114,792	62,271	21,501	14,664	80,302	19,546	527,664
Rock excavation, cubic yards	4,047	843	548	174	.....	.....	.....	5,612
Tunneling, cubic yards	54,800	36,030	24,133	4,748	.....	.....	.....	119,711
Concrete masonry, cubic yards	35,237	20,724	17,509	5,474	869	9,591	7,212	96,616
Brick masonry, cubic yards	1,881	1,112	1,982	2,270	.....	338	2,056	9,639
Steel erected, tons	3,269	1,948	1,858	540	71	877	978	8,563
Cast-iron erected, tons	9,591	10,577	5,099	1,428	.....	.....	.....	26,695

These totals added to the totals given in similar table hereinbefore submitted for Contract No. 2, give the total amount of such work done by the Board to date.

The total estimates made for all work done on Contract No. 2 to and including June 30, 1907, for which the contractor has received payment, are as follows:

Year 1903 — Regular work	$202,457.06
Year 1904 — Regular work	620,425.62
Year 1905 — Regular work	491,504.53
Year 1905 — Extra work	82,895.00
Year 1906 — Regular work	314,718.97
Year 1906 — Extra work	457,081.87
1907 to June 30 — Regular work	80,058.02
1907 to June 30 — Extra work	235,805.73
Total	$2,484,946.80

The total estimates for payment of all work done by the Board to date, comprising both Contract No. 1, and Contract No. 2, are as follows:

Contract No. 1, regular	$34,483,000.00
Contract No. 1, extra	5,058,488.04
Contract No. 2, regular	1,709,164.20
Contract No. 2, extra	775,782.60
Total	$42,026,434.84

WORK ON SEWER DIVISION.

All sewer construction in connection with the Manhattan-Bronx Railroad Contract No. 1, and the ventilating chambers, was reported as completed in the last annual report. The widening and paving of Broadway at One Hundred and Fifty-seventh street by the Bureau of Highways has changed the surface drainage conditions to such an extent that during several heavy rain storms there was danger of the water flowing over the landing at the top of the stairs and then into the subway. As a relief for these conditions two additional receiving basins were built by the Bureau of Sewers on the recommendation of the Commission and the size of the outlet of the basin at the northwest corner was changed from 12 inches to 15 inches, and the rate of grade was increased by the Commission.

During the six months of 1907 ending June 30, the principal sewer work on Contract No. 2, Brooklyn-Manhattan Railroad, was on the 15-ft. storm sewer located along the east wall of the depressed track at Fourth avenue and Atlantic avenue, Brooklyn. Of this work about 90 per cent. is completed. In the last annual report, plans were said to have been prepared for the relocation of this sewer and the reasons for it stated. The method of con-

struction is of more than usual interest. Accompanying the plans annexed to this report is a drawing which shows the different steps in the method of supporting the arch of the old sewer while a new invert of a rectangular section was being built in the portion of the sewer of which the alignment remained unchanged, and where the roof of the sewer had to be lowered because of the additional depth required for the tracks.

Since work has been progressing on this sewer, plans have been prepared for a subway along Ashland place passing under the present subway and along Fourth avenue. These plans involve the destruction of the 15 ft. storm sewer. The problem of taking care of this sewer which has always been a serious one, has been very much simplified by the plans prepared by the Bureau of Sewers of Brooklyn, which comtemplate the entire abandonment of this sewer eventually.

Sewer construction was begun at Park and Mulberry streets on Route 9, Brooklyn loop lines, on June 16. Studies for the rearrangement of sewers have also been made and plans prepared in connection with proposed subways on Lexington avenue, and the Seventh and Eighth avenue routes in Manhattan and the Bronx and on the Fourth avenue and Bensonhurst routes in Brooklyn.

The following tables give the linear feet of sewer built from January 1 to June 30, 1907, and the total to date. They also show the amount of work remaining to be done on the original and modified contracts.

DETAILS OF LATERAL SEWERS TO JUNE 30, 1907—CONTRACT No. 2.

LOCATION.	Sub-contractor.	Date begun.	Size.	Lin. feet completed from Jan. 1 to June 30, 1907.	TOTAL LIN. FT. COMPLETED TO JUNE 30, 1907.				TO BE COMPLETED.		Lin. feet original contract not built, to be abandoned.	OLD SEWER REMOVED.	
					PERMANENT.		BUILT AND ABANDONED.						
					Original contract.	Modified contract.	Removed.	To be removed.	Original contract.	Modified contract.		Lin. feet.	Size.
Fulton st., Manhattan	James Pilkington	April 21, 1903	3'6"x 2'4" brick	.....	314	.....	.....	.....	.....	.....	.....	5	3'6"x 2'4" brick
Maiden lane, Manhattan	James Pilkington	Mar. 2, 1903	3'6"x 2'4" brick	.....	332	.....	.....	.....	.....	.....	.....	332	4'5"x 5'5" brick
			3'0"x 2'0" brick	.....	10	.....	.....	.....	.....	.....	.....	10	3'0"x 2'0" brick
					342							342	
State st., Manhattan	James Pilkington	Nov. 8, 1902	4'0"x 3'0" brick	.....	336	.....	.....	.....	.....	.....	.....	250	4'0"x 3'6" brick
Court st. at Joralemon st., Brooklyn.	Cranford & McNamee.	July 10, 1906	3'6"x 2'4" brick	5	105	.....	.....	.....	.....	.....	.....	115	24"x 18" brick
			20" C. I. pipe	.....	12	.....	.....	.....	.....	.....	.....	.....	.....
			18" C. I. pipe	.....	12	.....	.....	.....	.....	.....	.....	.....	.....
				5	129							115	
Joralemon st. at Borough Hall, Brooklyn.	Cranford & McNamee.	Mar. 21, 1903	12" vit. pipe	32	185	.....	.....	.....	.....	.....	.....	75	12" vit. pipe
Lafayette and Fleet sts., Brooklyn.	Cranford & McNamee.	Oct. 9, 1905	3'6"x 2'4" brick	23	.....	973	.....	.....	.....	.....	.....	836	12" vit. pipe
			24" C. I. pipe	23	.....	63	.....	.....	.....	.....	.....	.....	.....
				46		1,036						836	
Hudson ave., Brooklyn	Cranford & McNamee.	Mar. 30, 1903	4'6"x 3'0" brick	.....	2,322	.....	.....	.....	.....	85	.....	480	3'6"x 2'4" brick
			36" C. I. pipe	.....	.....	.....	.....	.....	.....	83	.....	745	15" vit. pipe
			42" C. I. pipe	.....	.....	.....	.....	24	.....	.....	50	.....	.....
			4'6"x 1'4" steel box	.....	.....	.....	.....	.....	.....	30	.....	966	12" vit. pipe.
			15" vit. pipe	.....	30	.....	.....	.....	.....	.....	.....	.....	.....
					2,352			24		198	50	2,191	

Nevins and Livingston sts., Brooklyn.	Cranford & McNamee.	Mar. 6, 1906	3'0" x 2'4" brick	.....	.....	252	.....	.....	.....	3	.....	282	12" vit. pipe.
												28	15" vit. pipe.
			18" vit. pipe...	.....	.....	359	.....	.....	.....	6	.....	247	3'0" x 2'0" brick
						611				9		557	
Flatbush ave. at Fourth ave., Brooklyn.	Cranford & McNamee.	Oct. 18, 1906	15'0" cir. brick.	270	.....	270	.....	.....	.....	22	.....	.....	.....
Ashland place, Brooklyn.....	Cranford & McNamee.	Not begun....	6'0" cir. brick..	.....	.....	.....	.....	.....	1,072	.....	1,072	.....	.....
			6'0" x 4'0" brick	.....	.....	.....	.....	.....	255	.....	255	.....	.....
			60" C. I. pipe..	.....	.....	.....	.....	.....	12	.....	12	.....	.....
			36" C. I. pipe..	.....	.....	.....	.....	.....	420	.....	420	.....	.....
			18" vit. pipe...	.....	.....	.....	.....	.....	20	.....	29	.....	.....
									1,779		1,779		
Grand totals.....	.....	.....	.....	353	3,658	1,917	.... .	24	1,779	220	1,829	4,371	.....

DETAILS OF LONGITUDINAL SEWERS TO JUNE 30, 1907 — CONTRACT NO. 2.

LOCATION.	Sub-contractor.	Date begun.	Size.	Lin. feet completed from Jan. 1 to June 30, 1907.	TOTAL LIN. FT. COMPLETED TO JUNE 30, 1907.				TO BE COMPLETED.		Lin. feet original contract not built, to be abandoned.	OLD SEWER REMOVED.	
					PERMANENT.		BUILT AND ABANDONED.						
					Original contract.	Modified contract.	Removed.	To be removed.	Original contract.	Modified contract.		Lin. feet.	Size.
Broadway — City Hall to Battery place Manhattan.	Degnon Contracting Co.	Feb. 8, 1904	18″ C. I. pipe	.....	206	.....	.....	.....	.....	.....	.....	370	4′0″ x 3′0″ brick
			3′0″ x 2′0″ brick	.....	30	.....	.....	.....	.....	.....	.....	190	3′8″ x 3′4″ brick
			3′0″ x 2′4″ con.	.....	277	.....	.....	.....	.....	.....	.....	235	3′7″ x 3′6″ brick
			3′0″ x 2′4″ brick and concrete	.....	70	.....	.....	.....	.....	.....	.....	100	3′6″ x 2′4″ brick
			3′6″ x 2′4″ brick	.....	1,092	.....	.....	.....	.....	.....	.....	250	3′0″ x 2′0″ brick
			4′0″ Clr. brick	.....	6	.....	.....	.....	.....	.....	.....	.....	.....
					1,681							1,145	
Fulton st.— Borough Hall to Flatbush ave., Brooklyn.	Cranford & McNamee.	Dec. 5, 1904	12″ vit. pipe	856	1,685	531	.....	.....	351	70	.....	35	3′6″ x 2′8″ brick
			15″ vit. pipe	.....	196	.....	.....	.....	.....	.....	222	1,068	2′8″ x 2′3″ brick
			18″ vit. pipe	.....	279	361	1,396	.....	.....	140	601	701	15″ vit. pipe
			24″ vit. pipe	.....	.....	.....	.....	.....	60	.....	.....	2,532	12″ vit. pipe
			8″ C. I. pipe	81	.....	176	.....	.....	.....	4	.....	.....	.....
			12″ C. I. pipe	.....	15	.....	.....	.....	83	.....	.....	.....	.....
			18″ C. I. pipe	91	819	.....	12	.....	.....	.....	.....	.....	.....
			24″ C. I. pipe	.....	.....	.....	.....	.....	120	.....	.....	.....	.....
			3′6″ x 2′4″ brick	45	173	.....	.....	.....	63	.....	.....	.....	.....
				1,073	3,163	1,068	1,408		677	214	823	4,336	
Flatbush ave.— Fulton st. to Atlantic ave., Brooklyn.	Cranford & McNamee.	June 29, 1904	12″ vit. pipe	50	295	198	437	132	436	278	.....	1,875	12″ vit. pipe
			15″ vit. pipe	.....	25	20	128	.....	125	117	.....	320	15″ vit. pipe
			18″ vit. pipe	.....	.....	.....	316	.....	.....	286	.....	782	18″ vit. pipe
			14″ C. I. pipe	165	100	65	.....	.....	170	5	.....	50	4′0″ x 3′0″ brick
			18″ C. I. pipe	.....	.....	.....	12	.....	.....	.....	148	.....	.....
			4′9″ x 3′2″ brick	.....	.....	.....	.....	.....	.....	20	.....	.....	.....
				215	420	283	893	132	731	706	148	3,027	
Joralemon st. at Borough Hall.	Cranford & McNamee.	Feb. 8, 1907	12″ vit. pipe	110	110	.....	.....	.....	16	.....	.....	.....	.....
Grand totals				1,398	5,374	1,351	2,301	132	1,424	920	971	8,508	

STATIONS.

October 28, 1907.

During the six months ending June 30, 1907, very little construction or interior finish work on stations has been in progress on Contract No. 1. The permanent elevated station at Two Hundred and Twenty-fifth street and Broadway, and the temporary one at Two Hundred and Thirtieth street have practically been the only stations worked upon. A portion of the Two Hundred and Twenty-fifth street station had already been opened to the public, at the beginning of the year, on January 14. The temporary station at Two Hundred and Thirtieth street was opened for use on January 27. The elevated station at Two Hundred and Seventh street and Broadway, which was completed during the year 1906, was opened on April 1, 1907.

Plans were prepared for the elevated station on the Van Cortlandt Park extension, Two Hundred and Thirty-first, Two Hundred and Thirty-eighth and Two Hundred and Forty-second streets and Broadway; and also at Bronx Park, on the West Farms branch. Owing to street changes and other causes they will probably have to be modified; no construction work has yet been begun upon them. These four last mentioned stations are the only ones to be constructed to complete the station work on Contract No. 1.

On Contract No. 2, work has progressed on the four Brooklyn stations, none of which had been completed at the beginning of the year. The Borough Hall station has been practically completed. The interior finish of the Hoyt street station is about half done. The construction of the Nevins street and Atlantic avenue stations has not advanced sufficiently to permit any interior finish work to be begun.

Altogether sixty-four contract drawings have been prepared covering stations on the Lexington avenue, Seventh and Eighth avenues, Manhattan loop and the Fourth avenue route in Brooklyn. Besides these finished drawings a great many studies have been made for other stations on the same route.

VENTILATION.

Plans which had been carried out for the purpose of improving the ventilation and cooling the air of the subway were fully described in the report for 1906. It was there stated that further work was not justifiable until the experience of another summer indicated what improvement had been effected.

As a result of the above work, the greater frequency of the air renewal throughout the winter, spring and early summer was clearly apparent.

The inside temperatures conformed more nearly to those outside, after the ventilating chambers were constructed. The following table represents the monthly average temperatures inside and outside of the subway for the first six months of 1905, 1906 and 1907:

TABLE OF AVERAGES AND DIFFERENCES OUTSIDE AND INSIDE TEMPERATURES.

MONTH.	1905.			1906.			1907.		
	Outside.	Inside.	Differences.	Outside.	Inside.	Differences.	Outside.	Inside.	Differences.
January	27.5	54.2	26.7	37.3	61.5	24.2	32.2	49.7	17.5
February	24.6	52.0	27.4	31.2	59.5	28.3	24.4	47.7	23.3
March	40.0	57.5	17.5	34.9	59.0	24.1	40.8	52.5	11.7
April	49.8	65.5	15.5	51.7	66.0	14.3	45.0	59.0	14.0
May	60.5	71.2	10.7	61.8	73.0	11.2	55.3	60.0	4.7
June	68.8	77.5	8.7	71.5	80.5	9.0	66.2	72.0	5.8
Average for six months	45.2	63.0	17.8	48.1	66.6	18.5	44.0	56.8	12.8

During the first two years the only means of renewing the air was through the station stairways, during the last year the gratings at stations and the ventilating chambers were in use. In these former cases the differences between the inside and outside average temperatures for the six months were 17.8 and 18.5 respectively, while in the latter case, with the ventilating chambers in use, the difference was 12.8 degrees, one-third less than in the former cases.

The temperature inside was five degrees nearer the cooler outside temperature. This indicated a more frequent air renewal. Again, temperature chart No. 5 appended shows that the inside and outside temperature changes were more nearly synchronous after the ventilating chambers were in use than formerly. During the winter some of the gratings over the stations had to be closed temporarily in order that comfortable conditions might be obtained.

From these facts it is concluded that the gratings at the stations and the ventilating chambers between them would result in a material improvement under summer conditions. Therefore on June 13, 1907, the Board authorized additional grating openings to be constructed on the Broadway branch north of the Ninety-sixth street station, as follows:

	Sq. ft.
At 103d street station	655
At 110th street station	640
At 116th street station	720
At 145th street station	948
At 157th street station	360
Between 139th and 143d streets over the train yard	3,000
Total	6,323

The supplementary contract covering this work was approved by the Board on June 27, 1907.

A preliminary and final report of Dr. George A. Soper, on the sanitary quality of the subway air appeared in the reports of 1905 and 1906 respectively. During the course of Dr. Soper's investigation it was found that a considerable amount of iron dust was contained in the subway air, Dr. Soper deeming it of sufficient import to have special studies made to determine whether injurious effects were being produced by the iron particles upon the health of employees of the company operating the subway. Dr. Soper, on authority of the Board, proceeded to investigate this phase of the subject, and on May 1, 1907, submitted a report to the Board, of which a synopsis is hereto annexed.

On Contract No. 2 provision has been made for ventilating the East river tunnels and the portions of the subway being constructed in Brooklyn. The Manhattan portion of the work was completed before it appeared that special provision for ventilation was necessary.

For ventilating the tunnels two ventilating shafts are being constructed, one in Battery Park in Manhattan, the other in Joralemon street in Brooklyn. These shafts are 5,500 feet apart. In a chamber at the top of each shaft two motor driven blowers of 46,500 cubic feet of air per minute capacity are to be installed. The air is to be delivered through flues to nozzles located at both sides of each tunnel section. Normally the air will be discharged into the tunnels behind and in the direction of the moving trains; that is, the blower plant in Manhattan will deliver its air into the south or east bound tube, and the one in Brooklyn into the north or west bound tube.

Dampers will be provided in the flues at both ends of the tunnel, and so arranged that the direction of the air can be reversed should emergency require it. These dampers will be operated by motors so interlocked that it will not be possible to discharge air into both ends of either tubes at one time. The control of these chambers will be placed in the hands of a man who at all times will be on duty at the Bowling Green signal station, and who will have a direct telephone communication with the telephone stations located in the tubes at intervals of about 300 feet. At each plant suitable dampers will be provided so that either blower may be operated, or if desired both may be run at the same time. The simultaneous operation of the two blowers in each plant will secure only a slight increase in the amount of air delivered.

To ventilate the Brooklyn portion of the subway ventilating chambers have been constructed at Fulton and Jay streets, at Fulton street and DeKalb avenue and at Fulton street and Lafayette avenue. As in Manhattan these chambers will be constructed about midway between stations; blower plants are to be installed in each of these chambers for the purpose of exhausting the air from the subway at these points. To permit a free inlet of air a large amount of grating surface has been constructed over each station. These gratings have been located immediately adjacent to the curb lines on both sides of the street and suitable drainage is provided under them.

Accompanying this report are plans showing the method of constructing these grating openings at the Hoyt street station, and ventilating shafts and appurtenances in Battery Park and Joralemon street.

STATION.	Ventilating chamber.	Grating areas (gross).	Louvre areas (gross).	Number of fans.	Diameter of fans.
		Sq. ft.	*Sq. ft.*		*Feet.*
Borough Hall	.....	1,230			
	Jay street....	760	400	2	7
Hoyt street	.....	1,950			
	DeKalb ave...	500	300	2	7
Nevins street	.....	1,600			
	Lafayette ave.	610	600	2	7
Flatbush and Atlantic ave.	.....	310			

Report of an investigation into the possible effects of subway dust on the health of the employees of the Interborough Rapid Transit Company.

NEW YORK, *May* 1, 1907.

MR. ALEXANDER E. ORR,

Rapid Transit Railroad Commissioners; No. 320 *Broadway, New York.*

SIR.— In accordance with instructions contained in your letter of March 24th, 1906, I have made an investigation into the possible effects of subway dust on the health of the men engaged in operating the road, and I here respectfully present my final report upon this subject.

The investigation warrants, in my judgment the opinion that the subway dust has had no appreciable effect upon the health of the men.

At the same time your attention is invited to the fact that dry pleurisy was found to exist to a much greater extent among the subway workers than is common. The cause of this excessive amount of pleurisy was at first not apparent, but a careful study of the matter has led me to conclude that most of the dry pleurisy found was the result of attacks of acute pleurisy experienced by the men before entering upon their subway employment.

In view of the unusual scientific and practical interest which attaches to this subject, the studies made into the possible effects of the dust and the possible causes of the pleurisy are described with considerable fullness in this report.

Thanks are due to many persons for useful help. The Interborough Rapid Transit Company through Mr. Frank Hedley, general manager, granted requests for information concerning the men and furnished the one hundred employees who were examined.

The physical examinations and analyses were made with much skill by Dr. James Alexander Miller, instructor in physical diagnosis at the College of Physicians and Surgeons, assisted by Doctors H. C. Hanscom, J. M. O'Connor and I. O. Woodruff. In the autopsies and subsequent histological examinations thanks are due to J. H. Larkin, adjunct professor of pathological anatomy and to coroner's physicians T. D. Lehane and P. F. O'Hanlon. To Dr. Frank B. Mallory, associate professor of pathology, Harvard Medical School, who collected records to show the pleurisy found in 1,008 autopsies performed at the Boston City Hospital, this investigation is also indebted. Finally a number of eminent pathologists and medical practitioners aided the work by highly valued suggestions and opinions.

South Tube in Joralemon Street, Brooklyn.

For convenience the investigation will be considered under the following heads:

1. Plan of the Investigation.
2. The Condition of the Air.
3. The Dangers of the Dust.
4. Description of the Subway Employees.
5. Results of the Physical Examinations of the Employees.
6. Results of the Analyses of the Sputum, Urine and Sweat.
7. Results of the Autopsies.
8. Possible Causes and Consequences of the Pleurisy.
9. Conclusions and Recommendations.

(General Details.)

Certain specific recommendations seem to be required under the circumstances.

1. Care should be taken that persons employed in the subway are free from respiratory disease or a tendency toward it. This rule should be extended to all grades and positions and made to apply, also, to the women who operate the news stands.

2. Thorough physical examinations, especially of the respiratory apparatus and heart, should be made of all employees when they are first engaged and at yearly intervals subsequently.

3. While the dust was not proved to have produced harmful results, sanitary considerations require that it be prevented as far as practicable from getting into the air. To this end (a) sand and sawdust should not purposely be scattered on the stairways and platforms, as at present, (b) sweeping and cleaning should be done in a more strictly sanitary manner, preferably in accordance with the recommendations of the Advisory Board of the Department of Health, and (c) investigations should be made to determine whether it is feasible to reduce or collect much of the iron dust.

4. The city ordinance against spitting should be enforced to the letter. Although some progress has already been made in preventing it, spitting is still practiced occasionally on the platforms and on the roadbed. Not only passengers, but employees are offenders in this direction.

Respectfully submitted,

GEORGE A. SOPER, PH. D.

Dr. Soper presented in detail a report on the result of his investigations, and the principal conclusions reached by him follow:

1. The air of the subway, as judged by analyses and by careful studies of the health of the men, was not injurious.

2. The most objectionable feature of the air was the dust which consisted chiefly of angular particles of iron. It was possible, also, that injurious bacteria might sometimes be associated with these metallic particles. Strict enforcement of the city ordinance against spitting and the want of skillful care in cleaning the subway made this danger greater than it need be.

3. The odor and heat of the subway, although very disagreeable, were not actually injurious to health. The strong draughts and changes of temperature which occurred at the stations were the most objectionable atmospheric conditions, so far as health was concerned.

4. The employees submitted by the company for physical examination were a particularly robust lot of men. From their excellent physique, it appeared that they had been carefully selected, a fact which was explained when it was found that a large majority of the men had previously been engaged in railroading, where capacity to do hard manual labor was required. It was safe to assume that the employees examined represented a fair average of all of those who came in close contact with the passengers, at least so far as resistance to disease was concerned.

5. There had been very little sickness among the employees during their period of subway employment, judging by the accounts which the men gave. No information with respect to this matter was obtainable from the operating company. Many of the men claimed to have gained weight since they had been working in the subway, a fact due apparently less to any peculiarly healthful property of the air than to the easier work required.

6. Most of the men spoke of drowsiness. This was perhaps to be explained on account of the comparative darkness of the subway, the monotony of the work and fatigue to the eyes. The drowsiness was never sufficient to keep the men from performing their duties properly.

7. A large number of employees complained of yellow stains which came upon their underclothing, as they supposed, from their sweat. This caused considerable inconvenience. The stains probably resulted from iron particles upon the body which were acted upon by the sweat. Investigation excluded the probability that the sweat itself was discolored.

8. Careful physical examination showed that an excessive amount of dry pleurisy, without pain or other physical discomfort, existed among the men. Pleurisy occurred to the extent of 53 per cent. among the employees and to the extent of 14½ per cent. among persons not engaged in subway work.

The cause of the dry pleurisy was not at first apparent, but upon investigation it appeared to have been in no way due to the subway. Nine per cent. of the men had medical histories which accounted for their condition and 28 per cent. had worked for many years under conditions known to be favorable to the occurrence of this disease. The pleurisy had no visible effect upon the health of the men and was not likely to be injurious to them in the future.

9. Congestion and inflammation of the upper air passages were prevalent. Rhinitis and pharyngitis in acute or chronic form occurred in about 70 per cent. of the men examined. Laryngitis was less common, occurring in about 55 per cent. These figures are somewhat above the normal, considering the degree of severity represented. No case of bronchitis was discovered. The prevalence of the minor respiratory affections noted was due apparently more to the previous employments of the men than to their present surroundings, although the excessive use of the voice made by the conductors was likely to aggravate these affections.

10. Analyses of the sputum, urine and sweat of the men showed that iron dust was given off only in the sputum. This sputum was derived mostly from the mouth and throat, where most of the iron particles drawn in with the inspired air were caught.

11. The findings at autopsy threw no light upon the possibly evil effects of the dust. The men whose bodies were examined had worked too short a

time in the subway for information of value in this direction to be obtainable. Iron was found in the lungs of all, but to an extent which had produced no evil consequences.

RECOMMENDATIONS.

Certain specific recommendations seem to be required under the circumstances.

1. Care should be taken that persons employed in the subway are free from respiratory disease or a tendency toward it. This rule should be extended to all grades and positions and made to apply, also, to the women who operate the news stands.

2. Thorough physical examinations, especially of the respiratory apparatus and heart, should be made of all employees when they are first engaged and at yearly intervals subsequently.

3. While the dust was not proved to have produced harmful results, sanitary considerations require that it be prevented as far as practicable from getting into the air. To this end, (a) sand and sawdust should not purposely be scattered on the stairways and platforms at at present, (b) sweeping and cleaning should be done in a more strictly sanitary manner, preferably in accordance with the recommendations of the Advisory Board of the Department of Health, and (c) investigations should be made to determine whether it is feasible to reduce or collect much of the iron dust.

4. The city ordinance against spitting should be enforced to the letter. Although some progress has already been made in preventing it, spitting is still practiced occasionally on the platforms and on the roadbed. Not only passengers but employees are offenders in this direction.

WORK OF INSPECTION DEPARTMENT.

For the Manhattan-Bronx and the Brooklyn-Manhattan railroads, known as Contracts Nos. 1 and 2, respectively, all structural material, rolled steel, has been completed. The steel required for the construction of the West Side viaduct to Van Cortlandt Park, work on which commenced in the latter part of 1906 and is now nearing completion, has been shipped, excepting that required for the stations at Two Hundred and Thirty-first street, Two Hundred and Thirty-eighth street and Two Hundred and Forty-second street, and for the signal tower on this extension. A small additional order for steel required for guard-rail protection of columns on the sharper subway curves, Contract No. 1, also remains to be completed.

Some cast-iron work, principally column footings for the Van Cortlandt Park extension, is yet to be shipped, as well as columns for the Atlantic avenue station on Contract No. 2.

The total weight of steel accepted at the mills since commencing work amounts to:

For Contract No. 1	168,115,560 pounds
For Contract No. 2	26,226,169 pounds

Weight accepted during 1907 up to and including June 30:

For Contract No. 1	1,855,981 pounds
For Contract No. 2	1,408,705 pounds

The total weight of finished material shipped from the shops since commencing work amounts, at this date, to 165,468,008 pounds for Contract No. 1, divided as follows:

Subway proper, Line work	63,972,335	pounds
" " Stations	31,908,099	"
" " Manholes	701,349	"
" " Curve Betterments	368,177	"
Manhattan Valley Viaduct	5,302,595	"
West Side Viaduct proper	12,886,469	"
" " " Stations	968,187	"
" " " Harlem Ship Canal Bridge	3,720,082	"
" " " Van Cortlandt Park Extension	10,861,009	"
East Side Viaduct proper	29,669,240	"
East Side Viaduct Stations	1,894,262	"
Yards, 178th street and Boston road	3,216,204	"
Total	165,468,008	pounds

The total weight of finished material shipped from the shops since commencing work amounts, at this date, to 26,235,690 pounds for Contract No. 2, divided as follows:

Subway proper, Line work	12,902,126	pounds
Subway proper, Stations	11,676,303	"
East River Tunnel	1,648,872	"
Manholes	8,389	"
Total	26,235,690	pounds

During the first six months of 1907 the total weight of finished material amounted to 8,924,556 pounds for Contract No. 1, and 4,014,009 pounds for Contract No. 2.

A comparison between actual shipped weights and estimated weights of material on all drawings on which work has been completed to date shows:

	Contract No. 1.	Contract No. 2.
	Pounds.	*Pounds.*
Shipped weight of	165,468,008	26,235,690
Estimated weight of	164,485,188	25,979,497

These totals thus indicate an average excess in weight of only .60 of one per cent. for Contract No. 1 and .99 of one per cent. for Contract No. 2, the allowed specification variation being 2.5 per cent. deficiency.

During the six months of 1907 cast-iron material furnished consisted principally of segments for the East River tunnel, with columns for the Nevins street station, in Brooklyn, and some cast-iron water pipe for drainage of the East River tubes.

Sinking of Pile under Tunnel Tube in the East River.

The total weight of cast-iron, exclusive of a small amount of drawbridge material, shipped since the commencement of operations, amounts to 19,726,648 pounds for Contract No. 1, divided as follows:

Pipe (water and sewer)	10,221,237	pounds
Station columns, elevated fenders, manholes, etc	5,157,692	"
Harlem River tube segments	4,347,719	"
Total	19,726,648	pounds

The total weight of cast-iron for Contract No. 2 since the commencement of operations amounts to 66,299,366 pounds, divided as follows:

Pipe (water and sewer)	1,376,664	pounds
Station columns, manholes, etc	955,586	"
East River tube segments	63,967,116	"
Total	66,299,366	pounds

The weight shipped in 1907 to date was entirely for Contract No. 2, amounting to 5,402,717 pounds.

The total amount of cement shipped since the commencement of work amounts to 472,186,220 pounds; the quantity shipped in 1907 up to June 30 being 17,970,960 pounds. The latter was divided as follows:

	Contract No. 1.	Contract No. 2.
	Pounds.	*Pounds.*
47,292 barrels of Portland cement	1,916,530	16,054,430

The total of 53,792 barrels of Portland cement accepted during 1907 to date consisted of American Giant.

The average results from complete tests of 11 lots of this accepted American Giant cement, each lot consisting of 4,890 barrels, show:

FOR NEAT BRIQUETTES.	One day.	Seven days.	Twenty-eight days.
	Pounds.	*Pounds.*	*Pounds.*
Average results	297	646	780
Specification requirements	150	400	500

FOR SAND BRIQUETTES 2 TO 1.	Seven days.	Twenty-eight days.
	Pounds.	*Pounds.*
Average results	318	490
Specification requirements	200	300

The results thus obtained of this accepted cement show a percentage of gain, both neat and in sand mixtures, as indicated in table below, which also gives the average strength of boiling tests made:

BRAND OF CEMENT.	PER CENT. INCREASE 7 TO 28 DAYS.		Average strength of boiled briquettes.
	Neat.	Sand 2 to 1.	
			Pounds.
American Giant	20.7	54.1	677

During the six months ending June 30, 1907, there were broken, without failure, 2,403 briquettes; of 2 to 1 mortar briquettes 4,263 were broken, of which 11 failed. Total number of all briquettes, neat and mortar, 6,666.

Average results of all accepted cement during year periods follow:

NEAT.

	One day.	Seven days.	Twenty-eight days.
	Pounds.	*Pounds.*	*Pounds.*
1900	229	582	714
1901	300	645	763
1902	317	703	800
1903	309	745	854
1904	294	700	786
1905	284	678	773
1906	313	709	801
1907 to June 30	297	646	780

SAND 2 TO 1.

	Seven days.	Twenty-eight days.
	Pounds.	*Pounds.*
1900	276	434
1901	380	525
1902	419	545
1903	423	529
1904	408	509
1905	411	528
1906	389	508
1907 to June 30	318	490

The total amount of Portland cement inspected during the period of this report amounts to 63,792 barrels, of which total number 53,792 barrels were accepted and 5,000 barrels rejected, and 5,000 barrels were turned over to the manufacturer on account of high Magnesia content.

No natural cement was inspected during 1907.

Tunnel Tube in Battery Park.

The following tables show average strength of all accepted Portland cement at different periods up to 4 years, aggregating 1,242,595 barrels:

NEAT.

	One day.	Seven days.	Twenty-eight days.	Three months.	Six months.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Average results to June 30, 1907	298	683	794	799	801

	One year.	Two years.	Three years.	Four years.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
Average results to June 30, 1907	804	786	767	781

Average gain at 28 days, 16.2 per cent.

SAND 2 TO 1.

	Seven days.	Twenty-eight days.	Three months.	Six months
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
Average results to June 30, 1907	402	525	568	546

	One years.	Two years.	Three years.	Four years.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
Average results to June 30, 1907	526	485	454	487

Average gain at 28 days, 30.6 per cent.

With the view of satisfactorily establishing the ratio between the compression and tensile strength of cement mortars to possibly supersede the present standard method of making briquette tests, a beginning has been made, by testing all cement inspected during past six months under both conditions, a suitable compression machine of 400,000 pounds capacity having been added to the equipment of the Department's laboratory. While the volume of specimens so broken has not been sufficiently large from which to deduce absolute conclusions, the average comparative results indicate that the ordinary ratio running from 6 to 10 is too high, and that with large masses of concrete, a much lower unit strain than ordinarily used should be

adopted. The following table shows three results up to 6 months specimen age of identical 2 to 1 mortar box material, a fair natural sand being used:

	Twenty-eight days.	Three months.	Six months.
	Pounds.	*Pounds.*	*Pounds.*
Tensile strength per square inch of standard briquettes.	518	685	752
Compression strength per square inch:			
7"x7" cubes	3,600	4,662	5,455
8"x12" cylinders	2,909	3,719	4,420

The compression strength of the cubes average for the three periods 6.9 times the tensile strength of the briquettes, while by the cylinders the same ratio is less, averaging 5.6 times. The relation between the two ratios is close at all periods, and averages approximately 1¼ times better in the case of the cubes over the cylinders. This is probably due to the extra length of the cylindrical specimens, being 1½ times the diameter of the cubes. It is expected that continued comparative tests will show great advantage in the newer method of testing, since the tortional strains so objectionable and likely to occur in tension machines, and so markedly affecting their results, can be undoubtedly eliminated under compression tests. Attention is called to tensile results of the same material tabulated above, in 2 to 1 mortars with Standard quartz sand, showing the advantage of fairly good natural sand.

	Twenty-eight days.	Three months.	Six months.
	Pounds.	*Pounds.*	*Pounds.*
Tensile strength per square inch of standard briquettes.	504	579	587

The work covered by the chemical laboratory of the Department was:

Number of steel analyses, finished material, Contract No. 2	409
Number of cast-iron analyses, finished material, Contract No. 2	384
Number of paint samples analyzed	5
Number of asphalt samples analyzed	6
Number of waterproofing samples analyzed	1
Number of cement samples analyzed	14
Number of clay samples analyzed	72
Number of tin plate samples analyzed	1
Total	892

EQUIPMENT.

Since the first of the year additional car equipment has been ordered by the operating company to provide fifty new steel motor cars of a design which, it is believed, is to be an improvement on the present type, but having substantially the same general dimensions and equipment.

In the substation equipment no change has been made, except in the installation of apparatus in substation No. 21, which substation is now nearly ready for operation.

Cables of all kinds required for the East River tunnel tubes have been ordered, and a large part of this material delivered, and which will be installed as soon as the tubes are in readiness to have these cables put in.

The contact rail material is practically all in hand awaiting the completion of the tubes, and this construction is complete on the Manhattan end as far down as the ventilation shaft.

Plans for ventilation and drainage of the tubes have been decided upon, and apparatus ordered, and construction of the pump chambers and compressor rooms is well under way.

Four blowers, each having a capacity of 46,500 cubic feet of air per minute, have been ordered, together with the necessary flues, dampers, etc., for ventilation, and five compressors, each having a capacity of 750 cubic feet of free air per minute, are being provided for the operation of the five air pumps used for drainage.

The Borough Hall station lighting is nearly complete, and plans are ready for the lighting of the Nevins street station. Work is also progressing satisfactorily upon the tunnel lighting between Bowling Green and Borough Hall.

PASSENGER TRAFFIC.

October 28, 1907.

The ticket sales indicated that 94,776,576 passengers were carried in the subway during the six months ending June 30, 1907; this was 21 per cent. increase over the traffic during the corresponding six months of 1906.

Chart B, appended, shows the variation in the ticket sales by months, from the opening of the subway to date. June shows the smallest number carried during the past six months, amounting to 13,795,008; March shows the largest number, 16,940,872. The average number of passengers per month for the six months was 15,796,096.

The distribution of passengers over the different portions of the subway, as compared with the first six months of 1906, and the days of minimum and maximum traffic during the first six months of 1906 and 1907, are shown in the following tables:

DISTRIBUTION OF PASSENGERS OVER THE DIFFERENT PORTIONS OF THE SUBWAY.

LOCATION.	SIX MONTHS ENDING JUNE 30, 1906.		SIX MONTHS ENDING JUNE 30, 1907.	
	Number of passengers.	Per cent.	Number of passengers.	Per cent.
From South Ferry to Fulton street, inclusive	7,513,761	9.6	8,765,552	9.2
From City Hall to 96th street, inclusive	49,097,888	62.8	58,432,364	61.7
From 103d street, Broadway, to 230th street, Broadway	6,288,880	8.0	9,586,140	10.1
From 110th street, Lenox avenue, to 180th street, The Bronx	15,290,811	19.6	17,992,520	19.0
Total	78,191,340	100.0	94,776,576	100.0

DAYS OF MINIMUM AND MAXIMUM TRAFFIC.

	SIX MONTHS ENDING JUNE 30, 1906.		SIX MONTHS ENDING JUNE 30, 1907.	
	Date.	Passengers carried.	Date.	Passengers carried.
Minimum week day	June 30	295,920	Jan. 1	378,261
Maximum week day	April 2	550,531	Mar. 16	652,696
Minimum Sunday	May 27	192,298	June 2	224,438
Maximum Sunday	April 29	321,852	May 12	399,551

PASSENGER CHART

SHOWING THE NUMBER OF PASSENGERS CARRIED FROM EACH STATION OF THE SUBWAY DURING THE MONTHS OF JANUARY 1907 TO JUNE 1907 INCLUSIVE.

	January.	February.	March.	April.	May.	June.
City Hall	67,563	63,750	71,636	66,662	64,297	55,948
Brooklyn bridge	1,948,123	1,829,999	2,040,468	1,999,000	2,054,139	1,851,909
Worth street	165,545	158,105	169,662	164,946	156,195	130,149
Canal street	232,181	225,549	247,902	239,553	230,265	194,774
Spring street	304,268	303,389	325,124	314,295	298,640	246,297
Bleecker street	298,969	302,207	324,626	313,834	297,864	247,461
Astor place	500,077	492,884	538,963	504,710	475,341	383,834
14th street	843,200	823,635	911,622	857,472	819,758	685,740
18th street	331,400	321,380	352,751	332,258	301,399	245,881
23d street	630,351	608,482	687,573	665,573	631,919	518,132
28th street	333,399	313,474	341,019	338,508	310,289	234,813
33d street	364,409	355,581	392,038	381,987	364,403	295,958
Grand Central	987,929	923,779	1,025,634	1,006,964	980,802	834,447
Times square	811,358	824,719	858,153	775,412	739,685	574,755
50th street	289,000	277,290	313,214	306,377	294,040	244,810
Columbus circle	407,899	400,145	431,734	425,549	399,358	297,208
66th street	235,814	232,974	247,457	234,922	223,960	185,347
72d street	324,721	311,716	337,920	328,695	320,459	236,113
79th street	212,181	206,167	227,245	213,383	219,305	164,175
86th street	224,798	220,521	237,855	224,203	217,918	162,823
91st street	124,366	122,890	131,927	125,067	119,419	89,267
96th street	331,681	320,347	355,136	343,307	345,039	276,006
103d street	257,547	244,598	268,242	256,276	243,508	192,491
Cathedral parkway	146,813	136,686	152,783	145,911	143,041	113,363
Columbia university	128,396	131,441	139,563	136,127	129,761	89,392
Manhattan street	192,916	181,302	205,734	209,931	216,278	201,521
137th street	196,254	190,635	217,285	216,821	216,900	184,172
145th street	196,153	185,847	207,497	207,478	206,850	177,349
157th street	109,428	102,554	117,874	121,239	132,327	112,734
168th street	69,371	64,632	73,132	93,103	86,232	102,169
181st street	80,296	76,179	90,224	100,196	116,802	114,194
Dyckman street	12,002	11,086	17,310	29,375	51,175	62,949
207th street, opened April 1, 1907	.....	.....	.....	4,363	6,637	6,404

PASSENGER CHART

SHOWING THE NUMBER OF PASSENGERS CARRIED FROM EACH STATION, ETC.— *Continued.*

	January.	February.	March.	April.	May.	June.
215th street	4,089	3,651	4,628	6,069	7,564	7,378
221st street	45,096	.....	.....	.....	.....	.....
225th street, opened January 14, 1907	44,630	18,255	21,385	23,024	23,614	21,176
230th street, opened January 27, 1907	15,830	101,824	127,772	146,694	168,379	164,233
231st street	.....	.....	.....	.....	.....	.....
238th street	.....	.....	.....	.....	.....	.....
242d street	.....	.....	.....	.....	.....	.....
110th street and Lenox avenue	372,380	361,400	405,600	394,720	390,674	334,340
116th street	518,860	489,560	543,160	524,450	506,398	424,552
125th street	487,860	462,940	511,770	485,790	471,474	384,594
135th street	384,660	361,300	400,600	397,650	401,278	343,270
145th street	77,660	73,000	81,520	82,100	83,162	68,718
Mott avenue	59,670	56,570	64,520	62,750	63,508	58,014
North 3d avenue	254,700	239,310	274,830	270,410	268,580	229,184
Jackson avenue	191,940	177,040	200,360	201,500	202,945	186,873
Prospect avenue	250,415	230,735	264,130	262,320	267,876	247,806
Simpson street	76,860	70,858	86,326	94,203	105,985	101,945
Freeman street	137,404	128,371	149,611	151,826	156,261	143,608
174th street	21,610	18,350	21,740	25,703	28,127	25,042
177th street	73,510	69,180	81,440	83,560	88,918	85,224
180th street	68,560	61,860	81,480	94,400	121,360	127,772
Fulton street	701,476	651,058	721,492	702,573	669,150	578,137
Wall street	453,688	394,592	445,588	442,685	425,307	361,437
Bowling green	161,747	146,685	164,076	164,983	165,855	152,804
South Ferry	191,988	182,797	213,750	216,887	233,502	223,295
Total full months	15,847,485	15,263,279	16,925,081	16,517,794	16,263,922	13,781,987
Total partial months	105,556	.....	.....	.....	.....	.....
Sum total for full and partial months	15,953,041	15,263,279	16,925,081	16,517,794	16,263,922	13,781,987
Miscellaneous, not sold at stations	8,943	6,948	15,791	8,065	18,704	13,021
Sum total, including miscellaneous	15,961,984	15,270,227	16,940,872	16,525,859	16,282,626	13,795,008
Grand total	.....	.....	.....	.....	.....	94,776,576

NEW ROUTES AND EXTENSIONS.

The subject of future rapid transit for Greater New York, the various steps taken leading to the new routes as adopted on May 12, 1905, by the Rapid Transit Board to meet requirements considered adequate for each borough, and what labor and study was necessary on the part of the Rapid Transit Board and its engineering department to solve this complex problem, have been fully recounted in previous reports. Such of the routes considered expedient to have contracts advertised for letting were practically determined upon by the end of 1906 but many details still remained to be completed before actual construction of any one route could be undertaken, which work engrossed the Board's attention almost exclusively during the last six months of its tenure of office. The following is a detailed account of what new rapid transit railways during the past six months have been finally let for contract, and upon which construction has been begun; also others that were advertised for contract, but failed of successful bidding at the time of submission of bids, and the status also of such routes about ready to be contracted for and which it may be expected, at a date not now remote, may be in process of construction, subject to what action may be taken thereon by the Public Service Commission for the First District:

LEXINGTON AVENUE, 7TH AND 8TH AVENUE AND JEROME AVENUE ROUTES.

Of the routes ordered to be put under immediate contract by the end of 1906, the Lexington avenue, the Seventh and Eighth avenue, and the Jerome avenue routes were among those designated, a detailed description of which routes, together with the other routes proposed to be put under contract, was given in the report of 1906. Contract drawings for route No. 5, Lexington avenue route, which were begun in 1906, were completed. Also contract drawings for route No. 4, Seventh and Eighth avenue route, and for route No. 15, Jerome avenue route, were completed. Public hearings, as required by law, were held on dates set by the Board on the form of contracts for these three routes, which were then duly submitted to the Board of Estimate and Apportionment for that body to consent to their construction; and to the Corporation Counsel for approval of the contracts as to form; and all necessary legal measures having been taken, invitations to contractors duly appeared in the daily papers for the allotted time according to law, to advertise for bids, the date for opening same having been set for April 25, 1907, alternate bids being invited, first, for construction alone, and second, for construction, equipment and operation. At noon on that day, the time set for opening the bids, the Board formally met to receive any that might be submitted, but none was received, the Interborough Rapid Transit Company, which it was expected would make a tender for these new subways, failing to submit a formal bid. The reasons for not bidding are set forth in the following communication presented in person to the Board by the president of that company:

INTERBOROUGH RAPID TRANSIT COMPANY, EXECUTIVE COMMITTEE,
Nos. 13 to 21 Park Row,

NEW YORK, *April* 24, 1907.

ALEXANDER E. ORR, *President, Board of Rapid Transit Commissioners:*

DEAR SIR.— Ever since the opening of the existing subway this company has hoped that it would have an opportunity of completing the system of municipal rapid transit subways by continuing the east side line north

of Forty-second street to the Bronx, and by continuing the west side line south from Forty-second street to the Battery, so that there would be, as originally planned by your Board, two complete longitudinal rapid transit lines, connected by a crosstown line under Forty-second street. The increasing congestion in the subway, particularly on the express trains during the rush hours, has emphasized the need of these additional lines and this company had fully intended to submit a bid for their construction and operation, which, it was hoped, would be acceptable to your Board.

It is, therefore, with great regret that I have now to advise you that after very careful study by our engineers and officers of the plans and specifications for the new subways and the proposed form of contract for their construction and operation, the directors of our company have been forced to conclude that the building of the proposed four-track double-deck Lexington avenue subway north of Forty-second street and the four-track west side subway south of Forty-second street, and the operation of those lines in connection with the existing subway under the burdens imposed by your proposed contract and the existing law, are financial impossibilities. There are several reasons for this conclusion. In the first place, as will be seen from the report submitted herewith, our engineering advisers, including Mr. Wm. Barclay Parsons and Mr. John B. McDonald, agree in the conclusion that the proposed extensions (exclusive of pipe galleries) built in conformity with the plans and specifications of your Commission, would, under existing conditions, cost (including an allowance for easements and interest during construction) not less than $64,000,000 without equipment, and that the necessary equipment, including tracks, rolling stock, power plant, etc., would involve an additional expenditure of not less than $24,000,000 making the aggregate cost of building and equipping about thirty-nine miles (single track) of rapid transit subway approximately $88,000,000, as compared with the cost of about $71,000,000 for building and equipping the existing rapid transit lines (including the extension to the Battery) comprising about sixty-three miles of single track. This increase in cost is due partly to the requirements of the present law, the increase in the price of materials and labor, and the fact that about fourteen miles (single track) of the existing line is on an elevated structure, while all the new lines are underground; but the increase in cost is chiefly due to onerous provisions (not required by the existing law) of the new contract, and of the new plans and specifications, which provide: First, for unnecessary increase of cost of construction; second, for adding the cost of all easements to the cost of the subway; third, for the purchase of private property for station entrances; fourth, for a greatly increased responsibility for damages; and, fifth, for an increase in the diameter of the tunnels, an increase which will be of no value for extensions to the existing subway system. The fact that the express and local tracks on Lexington avenue are upon different levels also adds materially to the cost. The result is that our engineers estimate that the cost of the new subways fully equipped will be at the rate of $2,250,000 per mile of single track, as compared with the cost of $1,130,000 per mile for the existing rapid transit lines, an increase of about 100 per cent. This estimate is more than substantiated by the contract recently let for the construction of the Manhattan section of the city's subway loop between the bridges.

Not only would the construction of the proposed extensions involve a capital outlay per mile of track double that involved in the original subway lines, but under the proposed form of contract and the existing law the expenses which must be provided out of income are very much increased as compared with the original subway contract. In the first place, it may be assumed that the interest upon city bonds issued for the cost of the proposed subways will be from one-half per cent to three-quarters per cent higher than in the case of the original rapid transit bonds, and this conclusion is based on the supposition that the city can sell its bonds on a four per cent basis. In the second place, unlike the original subway, the entire investment in the new subway, including the lessee's property in the streets and equipment, will be subject to taxation. In the third place, various advantages conferred by the original contract are now eliminated; and, finally, the fact that the lease

is limited to twenty (20) years (subject to a renewal upon a revaluation the terms of which cannot be fixed in advance) makes it necessary to increase the annual charges by an amount sufficient to provide for the difference between the original cost of such of the equipment and other property as may be taken over by the city at the expiration of the lease and the probable value at which such property will be appraised at the end of the twenty years.

Another important consideration is the exceptionally broad power conferred by your form of contract upon the public authorities to require from time to time any changes in the construction of the subway and in the equipment and other appliances used therein, as shall to them seem proper. Such a requirement, especially in the case of a subway operated under a lease for only twenty years, creates a serious liability for additional expenditures for which adequate allowance would have to be made under any conservative financial plan.

For the reasons briefly summarized above we have concluded that if we were to build the proposed extensions in conformity with your plans and specifications and the proposed contracts, using the city's credit for the entire cost of construction under the contract (about $64,000,000) and outside investment capital (approximately $24,000,000), in the equipment, etc., and assuming that the new lines received all the traffic which it would be feasible for them to carry under the limitations imposed by traffic conditions in New York, it would not be possible to make net earnings above operating and maintenance expenses, sinking fund payments and taxes, sufficient to provide the interest upon the city's bonds, and five per cent upon the additional capital involved. Indeed a study of the reports of the Interborough Rapid Transit Company on file in your office, will demonstrate that a subway costing twice as much per mile as the existing rapid transit lines, operated under a lease less than half as long, subject to much higher taxation, and operated under a distinctly less liberal contract, would not earn even the rate of interest payable upon the city's bonds.

While for these reasons it is impossible for us to make a bid for the construction and operation of the subways required to complete our present system if they are to be constructed and operated under the proposed plans and specifications and contracts, we recognize that in view of the imperative need for greater rapid transit facilities in New York, a need which is becoming more urgent every year, it is due the city that, as lessees of the existing municipal subway system, we should do whatever is in our power to complete that system and otherwise increase our facilities.

I have, therefore, to advise you that we are prepared to enter into a contract for the construction at actual cost of two extensions of the existing municipal subway, one upon the west side, extending south from Forty-second street to the Battery, the other upon the east side, extending north from Forty-second street into the Bronx, and for the equipment and operation of such extensions, provided the cost of construction can be brought within the city's borrowing capacity, and provided the terms of the contract are such that we may reasonably expect the earnings from these additional subways to be sufficient to cover the interest and sinking fund upon the bonds of the city issued for their cost; a proper annual charge for depreciation in equipment and other property which the city may take over at an appraised value at the end of the twenty years' lease, and interest upon our additional investment for which city bonds would not be issued. In other words, we are willing to complete the existing rapid transit system so that there shall be, as originally planned by your Board, two complete longitudinal lines, one upon the east side and the other upon the west side of the city, without any prospect of profit beyond a fair rate of interest upon the additional investment involved, and obviously without an expectation of such a return, no capital could be secured for additional subway construction.

We shall be very glad to co-operate in carrying out some such plan as is above outlined if the opportunity is offered.

Very respectfully yours,

T. P. SHONTS,
Chairman of the Executive Committee.

INTERBOROUGH RAPID TRANSIT COMPANY, *Nos.* 13 *to* 21 *Park Row,*
NEW YORK, *April* 24, 1907.

T. P. SHONTS, ESQ., *Chairman, Executive Committee:*

SIR:—In accordance with your instructions, we have examined the contracts, plans and specifications of the new subways, as offered by the Rapid Transit Commission, and beg leave to report our estimate of the cost of construction.

We have estimated the cost of the subways at the smallest sum it is safe, in our judgment, to take the work, in view of the conditions of the contracts and specifications and details of the designs, and without any allowance for profit on construction to your company, as directed by you.

The contract provides that much land for stations and other purposes will be required, the cost of which is to be charged to the railway, but it is not to be included in the bid. Similarly terminal lands are to be acquired and improved, the cost to be ascertained at the conclusion of the work and charged to the railway. In order to give you an approximate idea of what these additional expenses may amount to, so that you may compute the fixed charges, we have made approximate estimates. The equipment has been estimated on figures of actual cost prices and on the basis of five cars for local trains and eight cars for express trains, in order to fit existing subway standards, and not according to a ten car basis, the more expensive requirements of the contracts. We have not included in our estimates, the cost of pipe galleries, as they are distinct from the railway.

To construct a four-track railway northerly from a connection with the present subway near Forty-first street and Park avenue via Lexington avenue to the Harlem river, and thence a two-track railway to One Hundred and Fifty-sixth street, in the Bronx, and a four-track railway southerly from a connection with the present subway near Forty-second street and Broadway, via Seventh avenue and West Broadway to the Battery, in accordance with the contracts, plans and specifications of the Rapid Transit Commission, will cost	$50,200,000 00
Easements	2,500,000 00
Terminals	1,300,000 00
Interest during construction	4,000,000 00
	$64,000,000 00
Equipment	24,000,000 00
Total	$88,000,000 00

Respectfully yours,

WM. BARCLAY PARSONS,
JOHN B. McDONALD,
S. L. F. DEYO,
LEWIS L. STILLWELL,
GEO. H. PEGRAM.

In view of this action by the Interborough Rapid Transit Company the counsel of the Board was instructed to prepare a comparative statement showing the relative advantages and disadvantages of the present subway contracts held by the Interborough Company, and of the contracts for the Seventh and Eighth avenue and Lexington avenue rapid transit railroads offered for bid. Pursuant to this request a report from counsel was received on May 2 as follows:

NO. 32 NASSAU STREET, NEW YORK, *May* 2, 1907

ALEXANDER E. ORR, ESQ., *President, Board of Rapid Transit Commissioners:*

DEAR SIR:—At the last meeting of the Commission I was requested to prepare a statement showing the difference between the proposed contracts for

Tunnel Tube in Battery Park at Ventilating Shaft.

the Lexington avenue and Seventh and Eighth avenue routes and the contracts for the subways now constructed or constructing, in respect to the several points mentioned in the letter of Mr. Shonts, dated April 24, 1907.

Mr. Shonts states in substance that after very careful studies by the engineers and officers of the Interborough Company, they have been forced to conclude that the building of the proposed four-track double-deck Lexington avenue subway north of Forty-second street and the four-track west side subway south of Forty-second street and the operation of those lines in connection with the existing subway under the burdens imposed by the proposed contracts and the existing law are financial impossibilities. The cost of construction, as it appears from his letter, and the estimates of his engineers, would amount to $56,200,000, which is much greater per mile than the cost of building the existing rapid transit lines.

"This increase in cost," he says, "is due partly to the requirements of the present law, the increase in the price of materials and labor and the fact that about fourteen miles (single track) of the existing line is on an elevated structure, while all the new lines are underground; but the increase in cost is chiefly due to onerous provisions (not required by the existing law) of the new contract and of the new plans and specifications."

I will take up the points which Mr. Shonts criticises in the new contract and the new plans and specifications in the same order in which he states them.

First.

He states there is unnecessary increase of cost for construction.

There is no explanation contained in the letter as to the changes which Mr. Shonts has in mind. They doubtless relate principally to changes in the specifications relative to the mode in which excavation is to be carried on. Under the contract of February 21, 1900, for the Manhattan-Bronx railway, which is the one that Mr. Shonts probably has in mind, the contractor was permitted to conduct his work by open excavation throughout the whole route with the exception of Park avenue and the Central Park.

In the present contract, as specifically required by the language of the route and general plans, the work is to be prosecuted by excavation under cover or by tunneling unless the Board shall expressly permit open excavation. There is no doubt that this method of construction (which is practically that pursued in lower Broadway under the contract of July 21, 1902) is more expensive, especially where rock is met with near the surface.

Second.

Adding the cost of all easements to the cost of the subway.

What is meant by this is that the proposed form of contract provides that, in calculating the rent to be paid by the operating company to the city, the cost of all easements acquired is to be added to the cost of construction, and the interest paid by the city upon bonds issued for these purposes, plus one per cent., is to be the rent. This is substantially what was done in the case of the Manhattan-Brooklyn contract, where the rent is to be the interest plus one per cent on bonds issued for construction, together with interest on bonds issued to acquire easements for right of way.

In the case of the portions of railroad which the Interborough Company considered building, the easements for right of way would cost some considerable amount of money.

On Lexington avenue a right of way through private property would have to be acquired at the southeast corner of Forty-second street and Fourth avenue; at the northwest corner of Forty-second street and Lexington avenue; between the northeast corner of Lexington avenue and One Hundred and Twenty-ninth street and the Harlem river; on the Bronx side of the Harlem river, between the river and the corner of Third avenue and One Hundred and Thirty-fifth street; and finally between the northeast corner of Morris avenue and One Hundred and Forty-eighth street and a point in One Hundred and Forty-ninth street, between Morris avenue and Courtlandt avenue. On

the Seventh avenue line, rights of way through private property would have to be acquired near the corner of Seventh avenue and Twelfth street, so as to enable the line to turn into Greenwich avenue; then under private property between Sixth avenue, near Clinton place and the northeast corner of Waverly place and MacDougal street, where the line turns into Washington square; and finally for a loop passing under private property and lying between West Broadway, Murray street, Greenwich street and Barclay street. The Interborough Company estimates the cost of these easements at $2,500,000. Whatever the cost might be, it would have to be paid by the city under the proposed contract; but the operating company would have to pay as rent, the interest which the city paid on the bonds issued for such property plus one per cent.

Assuming the cost to be $2,500,000, as estimated, and the interest payable by the city to be four per cent., this would add $125,000 a year to the rent payable, but would not otherwise affect the cost of the road to the contractor.

The Rapid Transit Act does not compel the Rapid Transit Commission to charge rent upon the cost of easements acquired for rights of way, but it has been the declared policy of the Board ever since 1902 to make such a charge.

Third.

The purchase of private property for station entrances.

This is, of course, a matter which the law does not regulate, but the policy of the Board, as declared for the past three or four years, has been to provide for putting station entrances within private property wherever possible. In the case of the Sixth avenue line it is expressly provided that this shall be done, except where the Board might give distinct permission to the contractor to put entrances in the streets. In the report of the committee on plans, dated April 28, 1904, it was stated "That in the construction of additional subways, arrangements should be made so that the entrances to the stations may be upon private property and not upon the streets, thus avoiding the impeding of traffic on the already obstructed sidewalks."

Fourth.

Greatly increased responsibility for damages.

In the contracts for the Manhattan-Bronx and Manhattan-Brooklyn rapid transit railways, the provisions as to the responsibility of the contractor for damages to abutting property were believed to be ample. In practice, however, serious doubts have arisen as to the meaning of these clauses. Accordingly, counsel were instructed by the committee on plans and contracts to draft a contract under which there could be no question as to the responsibility of the contractor for injuries to persons or property along the line. The insertion of such provisions is what Mr. Shonts refers to. If the Board so desires, the contract can, of course, be redrawn so as to leave the contractor responsible only for the use of reasonable skill and diligence; in which case it is probable that owners and occupiers of abutting property would have no redress in many cases, or would be able to hold the city of New York responsible. The accidents occurring in Park avenue and in Joralemon street have naturally been such as to warn the Board against leaving contracts for construction in a shape to invite doubtful litigation.

Fifth.

An increase in the diameter of the tunnels.

This increase is due, as I am informed by the engineers, to a desire to give a more efficient and satisfactory service. The reasons are, of course, of a technical kind, which I cannot undertake to state.

Sixth.

"The fact that the express and local tracks on Lexington avenue are upon different levels also adds materially to the cost."

Two-deck Bridge at the Harlem Ship Canal.

This is as much as saying that going up Lexington avenue adds materially to the cost. I understand from the engineers that it would be in the long run quite as expensive, if not more so, to make four tracks on the same level. Lexington avenue is a comparatively narrow street, where any other than a double deck construction would be almost impracticable.

Seventh.

"Another important consideration is the exceptionally broad power conferred by your form of contract upon the public authorities to require, from time to time, any changes in the construction of the subway and in the equipment and other appliances used therein as shall to them seem proper."

In the report of the committee on contracts of April 28, 1904, to which reference has already been made, the following occurs:

"The committee believes that * * * * * * * * stringent and satisfactory provisions in relation to the character and frequency of the service to be given may properly be inserted in the leasing part of the contracts."

In the contracts now under discussion, provisions were inserted in chapter three, the lease, reciting that the principal object of the city in making the contract was to secure for the public convenience an adequate, comfortable and rapid system of passenger traffic in the portions of New York that should be served by the railroad, and that the contractor had accordingly covenanted to do various things, such as to operate the railroad carefully and skillfully, according to the highest known standards of railway operation, to supply adequate rolling stock and to run trains so as to meet the reasonable requirements of the public, etc. The contracts then provided that if the Board should at any time be of the opinion that any additions to the rolling stock or other equipment, or any additions or changes in stations were necessary or that additional terminal facilities were required or any change was necessary, in order to carry out the purposes of the lease, or to promote the security, convenience and accommodation of the public, the Board might direct the making of such improvements, additions or changes as it deemed proper. If the contractor should neglect or refuse to comply with the directions contained in such notice, then it was agreed that in any legal proceeding instituted by the Board or other public authority to compel compliance with the obligations of the lease, the burden of proof at all stages of such proceeding should be upon the contractor to show that it was in fact discharging the duties and obligations of the lease, or that the additions, improvements or changes which the Board has directed to be made were unjust or unreasonable, or not in accordance with the terms of the lease.

The reasons for these clauses were fully discussed by the Board in 1903, in connection with the grant of a certificate to the Hudson and Manhattan Company. The question has several times been asked whether the Rapid Transit Board, under existing contracts, could compel the Interborough Company or other company to change methods of operation, or do other things in connection with the operation of the roads. The answer of counsel has always been that no such power was reserved by the leases or certificates, and that the Board therefore could do nothing more than advise, unless the act or omission complained of amounted to a breach of covenant. It has also been the opinion of counsel, concurred in by the Attorney General, that the State Railroad Commissioners had no general jurisdiction over the railways owned by the city and leased by it to operating companies.

Under these circumstances the clauses referred to were inserted following the lines of the suggestion made by Mayor Low in 1903 in respect to the Hudson and Manhattan certificate already referred to.

It will be seen that if carried into effect they would have been far less drastic than the powers which will be vested in the new Public Service Commission, if the bill now pending before the Legislature becomes a law. They would simply authorize the Commission to make orders and directions which would be *prima facie* regarded by the courts as reasonable and proper, but could not be enforced except through the medium of a court order.

Eighth.

Mr. Shonts further points out that in various respects the income would be reduced or the expenses which must be provided for out of income would be much greater, as compared with the original subway contracts.

These things are not due to changes in the form of contract.

A. Interest, on the supposition that the city can sell its bonds on a 4 per cent basis will be from ½ to ¾ of 1 per cent. higher than in the case of the original rapid transit bonds. This is beyond the control of the Board.

B. Unlike the original subway, the entire investment of the contractor in the new subway will be subject to taxation. This is due to changes in the rapid transit act adopted in 1905.

C. "Various advantages conferred by the original contract are now eliminated." This doubtless refers to the fact that under the existing law no advertising or merchandising of any kind can be permitted in the subway. This will make considerable difference in the profits of the operating company, but is imperative under the Elsberg Law.

D. The lease is limited to twenty years, subject to a renewal upon a revaluation, the terms of which cannot be fixed in advance. This is, of course, due to the rigid terms of the Elsberg Law, for which this Commission is in no degree responsible.

Trusting that the foregoing sufficiently answers the request of the Commission, I am

Respectfully yours,
GEORGE L. RIVES.

It was thereupon decided that the Committee on Plans and Contracts would take the matter under advisement and decide on what terms subsequent construction of any or all sections of these routes would be undertaken.

Coincidentally with the consideration of this question of construction of the Lexington avenue, Seventh and Eighth avenue and Jerome avenue routes, application was again renewed for the construction of an extra third track on the Second and Third avenue elevated railroads in Manhattan and the Bronx, the Interborough Company having applied for such authority for several years past. A hearing was given on this matter on May 2, 1907, and, as a counter-proposition, the board offered to grant to the Interborough Company authority to construct these additional third tracks on condition that that Company would agree to build those portions of the Seventh and Eighth avenue and Lexington avenue railways, in Lexington avenue north of Forty-second street, and in Seventn avenue south of Forty-second street, using its own capital both for construction and equipment, and to agree to arrange for a system of universal transfers on all its lines in the boroughs of Manhattan and the Bronx. This, however, was not acceded to by the Interborough Company.

BROOKLYN-MANHATTAN SUBWAY LOOP LINES.

As was stated in the report of 1906, the necessary legal measures were about consummated at the close of the year to get under contract the system of subway loops known as Route 9, providing for connection between the Brooklyn, the Manhattan and the Williamsburg bridges. On January 12, 1907, the commissioners of the Appellate Division approved the Manhattan sections of this route, with the exception of a proposed two-track spur down William street from Beekman street to Old Slip, opposition to it being that it was considered, if built, it would result in serious injury to the buildings on either side of the street; although two experts appointed by the

Rapid Transit Board to pass upon this question at the time reported in favor of its construction. By an order entered by the court on March 12, 1907, the report of the commissioners of the Appellate Division approving this route was confirmed. The requisite approval of this route by the Board of Estimate and Apportionment was obtained on January 25. Provision was made that the city contract only for the construction of this system of subways, so as to insure absolute control of it by the city, and that the portions of this route, extending through Centre and Delancey streets connecting the Manhattan terminals of the Williamsburg and Brooklyn bridges, be a four-track subway, to be contracted for separately in sections and be built with all possible speed, and that when completed it should not be restricted in its operation to any one company or system, but to allow any transportation line to make use of it under proper terms of compensation.

In the event of the Brooklyn Rapid Transit Company becoming a successful bidder for the operation of this portion of subway loop when completed, the question of cars in use by that company was considered by the Board, and it was decided that that company's rolling stock met the necessary requirements, or that at least any cars to be operated in the portion of this route connecting the Manhattan terminals of the Williamsburg and Brooklyn bridges should be as good as the most modern type used by the Brooklyn Rapid Transit Company on its elevated railway tracks.

SECTION 9-0-2, CENTRE STREET, FROM PEARL TO CANAL STREETS.

According to law a public hearing was called for February 28 to pass upon the form of a contract for that portion of this subway loop between Pearl street and Canal street, officially designated as Section 9-0-2, Brooklyn Loop Lines, including a spur running through Canal street to connect with the proposed Manhattan Bridge, this section being considered the most difficult to construct on account of the character of the soil along the route. A hearing on the form of contract was duly held on February 28, and there being no opposition to it, the contract was adopted by the Rapid Transit Board on that date. The approval of the Board of Estimate and Apportionment was accordingly requested and obtained on March 8, 1907; and the Corporation Counsel on March 11 approved the contract as to form. All legal measures therefore having been effected, bids for construction were duly advertised to be received at the office of the Board on April 11, and at noon on that date two bids were tendered, as follows:

Cranford Company:	
For construction of the railroad	$3,775,000 00
For construction of pipe galleries	50,000 00
	$3,825,000 00
The Degnon Contracting Company:	
For construction of the railroad	$2,952,000 00
For construction of pipe galleries	83,000 00
	$3,035,000 00

The bid of the Degnon Contracting Company being the lower, the contract for this section was awarded to that company, having been accepted by the Board on April 18, and being consented to by the Board of Estimate and Apportionment, was duly executed on April 27.

To provide for necessary means for construction at the public expense, as provided by the contract, the Rapid Transit Board made formal request upon the Board of Estimate and Apportionment to authorize the issue of corporate stock of the city of New York to the amount of $3,035,000, the sum bid for this section of railway, including pipe galleries, and the Comptroller of the city of New York was duly directed by the Board of Estimate and Apportionment to issue this amount of corporate stock, the same to bear interest at a rate not to exceed 4 per centum per annum.

Work was commenced between Baxter and Mulberry streets on this contract on May 27, 1907, the time limit for beginning and completing the work, as provided by the contract, to be within twenty-one months from the date of delivery of the contract, the contract being duly delivered to the contractor on the 9th of May.

SECTION 9-0-3, CENTRE STREET, FROM CANAL TO BROOME STREETS.

For the section of Brooklyn Loop Lines designated as 9-0-3, in Centre street, between Canal and Broome streets, a hearing on the form of contract was set for April 11, 1907, at 3 P. M., and held on that date, and the contract duly adopted by the Rapid Transit Board. The following day, April 12, the Board of Estimate and Apportionment approved this contract, and the Corporation Counsel's approval as to form was obtained on April 20. Proposals for bids were then duly advertised to be opened on Tuesday, May 14, when the following bids were received:

Cranford Company:	
For the railroad	$2,150,000 00
For the pipe galleries	60,000 00
	$2,210,000 00
The Degnon Contracting Company:	
For the railroad	$2,800,000 00
For the pipe galleries	75,000 00
	$2,875,000 00

The lowest bid, that of the Cranford Company, was accepted, after due consideration, by the Rapid Transit Board on May 23, and the contract executed on May 27.

The necessary issue of corporate stock of the city of New York to provide construction at public expense was duly authorized, amounting to $2,210,000, at interest not to exceed 4 per centum per annum, this amount covering the estimated expense of executing this contract, including the cost of pipe galleries. The contract was delivered to the Cranford Company on June 7, 1907, from which date the time of beginning and finishing the work under

Subway Ineline Near Brook Avenue in The Bronx.

the contract runs, the stated time for its completion being twenty months from the date of delivery of contract. Up to the end of June, 1907, ground had not yet been broken to commence work, but operations will be begun before long.

SECTION 9-0-1-, PEARL STREET TO PARK ROW; SECTION 9-0-4, CENTRE STREET TO THE BOWERY; SECTION 9-0-5, DELANCEY STREET, BETWEEN THE BOWERY AND NORFOLK STREET.

A public hearing on the forms of contract for Sections 9-0-1 and 9-0-5 of the Brooklyn Loop Lines, the former extending from Pearl street to Park Row, and the latter section covering that portion in Delancey street between the Bowery and Norfolk street, was called for May 9 and held on that date, and the contracts for these two sections adopted by the Board. For Section 9-0-4, covering that portion in the new extension of Delancey street, between Centre street and the Bowery, a hearing on the form of contract was called for May 16 and duly held, and the contract adopted by the Board for this section.

On May 10 the Board of Estimate and Apportionment approved the contracts for Sections 9-0-1 and 9-0-5 as above described, and these contracts were approved as to form on May 15 by the Corporation Counsel. The contract for Section 9-0-4 was approved on May 17 by the Board of Estimate and Apportionment, and approved as to form by the Corporation Counsel on May 20.

The necessary preliminaries incidental to the letting of contracts for these three sections having thus been completed, it was decided to advertise for bids simultaneously for all three sections, the bids to be opened on June 13. Bids were duly presented and opened on that date, when thirteen in all were received, as follows:

SECTION 9-0-1.

Patrick McGovern:	
For construction of the railroad	$1,257,000 00
Pipe galleries	10,000 00
	$1,267,000 00
Bradley Contracting Company:	
For construction of the railroad	$998,328 00
Pipe galleries	5,500 00
	$1,003,828 00
The Degnon Contracting Company:	
For construction of the railroad	$1,386,000 00
Pipe galleries	10,000 00
	$1,396,000 00
Williams Engineering and Contracting Company:	
For construction of the railroad	$1,250,000 00
Pipe galleries	7,500 00
	$1,257,500 00

SECTION 9-0-4.

The Degnon Contracting Company:	
For construction of the railroad	$1,938,000 00
Pipe galleries	60,000 00
	$1,998,000 00
Patrick McGovern:	
For construction of the railroad	$1,950,000 00
Pipe galleries	60,000 00
	$2,010,000 00
Cranford Company:	
For construction of the railroad	$1,690,000 00
Pipe galleries	45,000 00
	$1,735,000 00
Bradley Contracting Company:	
For construction of the railroad	$1,518,302 00
Pipe galleries	29,040 00
	$1,547,342 00

SECTION 9-0-5.

The Degnon Contracting Company:	
For construction of the railroad	$1,530,000 00
Pipe galleries	175,000 00
	$1,705,000 00
Bradley Contracting Company:	
For construction of the railroad	$1,229,136 00
Pipe galleries	69,300 00
	$1,298,436 00
Patrick McGovern:	
For construction of the railroad	$1,595,000 00
Pipe galleries	95,000 00
	$1,690,000 00
Thomas Crimmins:	
For construction of the railroad	$1,374,649 00
Pipe galleries	91,120 00
	$1,465,769 00
Cranford Company:	
For construction of the railroad	$1,800,000 00
Pipe galleries	80,000 00
	$1,880,000 00

The Bradley Contracting Company being the lowest bidder for all three sections, their bids were formally accepted by the Board the same day. The contracts for their construction were duly executed on June 27, and the Board of Estimate and Apportionment was requested by the Rapid Transit Board to direct the Comptroller of the city of New York to issue corporate stock, to provide construction at the public expense, to an amount not exceeding the sum bid for the three sections, including the construction of pipe galleries, such sum amounting to $3,849,606, the same to bear interest at not to exceed 4 per centum per annum.

Under the terms of the contracts for these three sections, the work of construction is to be completed within twenty months from the date of delivery of the contracts.

ROUTE No. 19.

Route No. 19, known as the Westchester Avenue Extension, as originally adopted on May 12, 1905, is described as follows:

Beginning at or near intersection of Lincoln avenue and East One Hundred and Thirty-eighth street, a three-track subway east on One Hundred and Thirty-eighth street to Southern Boulevard; thence a three-track elevated road on Southern Boulevard to Westchester avenue; thence on Westchester avenue and Westchester turnpike to the Village of Westchester at Williamsbridge road.

This route, however, was changed to take in that section over and along the extension of Westchester avenue, as laid out by law, to a point where such extension intersects the westerly side of the easterly boulevard. Below is a description of this route as amended:

Beginning at or near intersection of Lincoln avenue and East One Hundred and Thirty-eighth street, a three-track subway east on One Hundred and Thirty-eighth street to Southern Boulevard; thence a three-track elevated road on Southern Boulevard to Westchester avenue; thence on Westchester avenue and Westchester turnpike through the Village of Westchester, and over the extension of Westchester avenue, as laid out by law, to the intersection with the westerly side of the Eastern Boulevard.

As thus amended, the route was adopted by the Rapid Transit Board on May 17, 1906, and approved by the Board of Estimate and Apportionment on June 8, 1906, and shortly thereafter steps were taken to obtain the consents of a majority of the property owners along this route, which majority of consents were obtained by the end of January, 1907. Thereupon the Board considered the advisability of proceeding with the preparation of plans and contract and to advertise for bidders for its construction, and on January 31, 1907, referred the matter to the Board of Estimate and Apportionment to be advised in respect to the manner in which the contract should be advertised. Accordingly on April 12 the Board of Estimate and Apportionment recommended that alternate bids be invited, first, for construction only, and second, for construction, equipment and operation.

The above is the present status of this route, no further action having been taken by the board during the remaining few months of its existence. It has advanced thus far, practically in shape to be let for contract whenever it is considered desirable.

MANHATTAN BRIDGE ROUTE.

On April 18, 1907, the Rapid Transit Board revised the Manhattan B route, so as to allow for four tracks throughout the whole route, route as originally adopted providing for only two tracks, failed to adequate provision for connections between this route and a proposed s to be constructed under Third avenue, in the borough of Manhattan, with another proposed subway to be constructed under Canal street, of Centre street. This Manhattan Bridge route also includes a spur in M hattan to run from the Canal street branch of the loop line now being co structed under Centre street, Delancey street and Canal street to the Ma hattan Bridge.

The approval to the construction of this route was obtained by the Bo of Estimate and Apportionment on April 26.

FOURTH AVENUE, FORT HAMILTON AND CONEY ISLAND ROUTE.

The Fourth avenue, Fort Hamilton and Coney Island route forms a par of the so-called Tri-Borough route, for which the Board of Estimate an Apportionment on December 7, 1906, recommended to the Rapid Transi Board that alternate bids be invited, first, for construction alone, and second for construction, equipment and operation. The consents of property owners to the construction of this subway route remaining to be obtained to cover the Bensonhurst and Coney Island portion of the line, these consents were all obtained by April 18, 1907, through the individual efforts of Mr. F. A. Hutson, an enterprising citizen of Brooklyn, interested in the development of that borough. This Fourth avenue and Coney Island subway route, therefore being in shape by that date to be put under immediate construction, prompt measures were taken by the Rapid Transit Board to that end, and on May 31 it requested the Board of Estimate and Apportionment to rescind so much of its resolution of December 7, 1906, above referred to, relating to this route, so as to let contracts for construction only, of so much of the lines forming this route as include the Manhattan Bridge route and the Fourth avenue and Bensonhurst route and other routes in Brooklyn; these combined routes forming a line running from Chrystie street, in the borough of Manhattan, across the Manhattan Bridge and under Fourth avenue and other streets, in the borough of Brooklyn, with termini at or near Fort Hamilton and at Coney Island, being four tracks to Fortieth street and two tracks each under Fort Hamilton and Coney Island lines from that point; the two-track portions to be built as part of four-track lines, the remaining tracks to be added later as necessity should require. The total cost in constructing this entire route your engineer estimated would amount to a sum not to exceed $23,000,000.

On June 4 the consent of the Board of Estimate and Apportionment to the construction of this route as recommended by the Rapid Transit Board was obtained, and plans and contracts having been duly prepared the same were adopted by the Rapid Transit Board at its meeting on June 27, which was the last meeting of the Board before its retirement from office. A hearing on the form of contract as required by law was also ordered by the Board to be held on the last Thursday of July, 1907. This was as far as the Rapid Transit Board could proceed in this matter, the necessary further steps in the letting of contract for this route and proceeding with its construction devolves on the successors of the Rapid Transit Board, the Public Service

Foundation of Elevated Railroad on Broadway in The Bronx.

Commission for the First District, which assumes office on and after July 1, 1907.

STATION LOCATIONS, WEST FARMS AND WHITE PLAINS ROUTE.

Station locations for certain routes deemed urgent to be put under contract were given in the report of 1906 as having been approved by the Board on December 27, 1906; one of these routes being route No. 18, known as the West Farms and White Plains route, the station locations for this route not having at that time been determined upon. On January 16, 1907, your engineer submitted to the Board a plan showing the proposed locations of the elevated stations on this West Farm and White Plains route, which the Board duly approved on January 31, the stations, as located, being as follows:

Melville street and Morris Park avenue.
Bear Swamp road.
Pelham Parkway South.
Allerton avenue.
Burke avenue.
Gun Hill road.
East Two Hundred and Nineteenth street.
East Two Hundred and Twenty-fifth street.
East Two Hundred and Thirty-third street.
East Two Hundred and Thirty-eighth street.
East Two Hundred and Forty-first street.

PENNSYLVANIA TUNNEL AND TERMINAL RAILROAD COMPANY.

The progress of work on the tunnel railroad of the Pennsylvania, New York and Long Island Railroad Company, to which company a franchise was granted by the Rapid Transit Board in 1902, has been given in each year's report since construction was begun in 1903.

On June 26, 1907, the Pennsylvania, New York and Long Island Railroad Company passed into the control of the Pennsylvania Tunnel and Terminal Company, as its successor. On that date, the Pennsylvania, New York and Long Island Railroad Company, a corporation of the State of New York, and the Pennsylvania, New Jersey and New York Railroad Company, a corporation of the State of New Jersey, were consolidated under the corporate name of the Pennsylvania Tunnel and Terminal Railroad Company.

Construction of this railroad to June 30, 1907, has progressed as follows:

Beginning at a point on the west bank of the North river, the two tunnels extending to and under that river to the west side of Eleventh avenue, New York city, borough of Manhattan, have been fully excavated and iron-lined, and some concrete lining is now being laid therein. These tunnels are each 6,116 feet in length. From Eleventh avenue eastward to the terminal station site at the east side of Tenth avenue, a distance of 982 feet, excavation has been continued to within 100 feet of Tenth avenue, and some excavation has been done under Tenth avenue.

On the terminal site the excavation completed between Ninth and Tenth avenues is about 35 per cent. of the total; between Ninth and Eighth avenues about 60 per cent. of the excavation has been completed; between Eighth and Seventh avenues the excavation has been completed and 56 per cent. of the building foundations are constructed. In that portion of the station site immediately east of Seventh avenue 77 per cent. of the excavation has been completed.

Work on the viaducts in the vicinity of this station is now so far advanced that on Thirty-first street, between Seventh and Eighth avenues, the foundations and all concrete arches required for the roadway deck have been completed, a small portion of the back filling made, and paving has been started.

On Thirty-third street, between Seventh and Eighth avenues, 40 per cent. of the column foundations is completed, and excavation is now under way for an additional 44 per cent.

On Eighth avenue all column foundations are completed, and one-half of the north bent of the steel work has been erected. The superimposed retaining wall on the east side has been completed north of Thirty-first street for a distance of 210 feet and on the west side for a distance of 130 feet. About 12 feet in length of the floor plate has been completed.

East of the station site and under Thirty-third street open cut excavation has been commenced for a distance of 200 feet; and from a point about 250 feet west of Sixth avenue a drift has been extended 200 feet eastwardly. Between this point and Fifth avenue no full size excavation has been made, but a pilot tunnel has been extended westwardly from Fifth avenue a distance of 700 feet. From Fifth avenue to the shafts at First avenue, Manhattan, excavation is practically completed and concrete lining is being proceeded with.

East of the station site and under Thirty-second street open cut excavation has been commenced for a distance of 200 feet; and from a point about 250 feet west of Sixth avenue a drift has been extended 200 feet eastwardly. Between this point and Fifth avenue no full sized excavation has been made, but a pilot tunnel has been extended westwardly from Fifth avenue, a distance of 700 feet. From Fifth avenue to the shafts at First avenue, Manhattan, excavation is practically completed except for a short distance east of Fifth avenue, and immediately adjoining and under Fourth avenue, which has to be enlarged to full size section. The length of these two lines is about 10,500 linear feet.

The First avenue shafts in Manhattan are now completed, except for linings and stairways.

The four single-track tube tunnels, extending from First avenue shafts under the East river to the Long Island City shafts, were extended to a point about 1,200 feet east of First avenue shafts and 700 feet west of Long Island City shafts. This leaves an average distance of 2,000 feet yet to be completed. These tunnels are all iron-lined, but no concrete lining has been completed. Each tunnel is about 3,900 feet in length.

Excavation for the four tunnels extending eastwardly from the Long Island City shafts to the east side of East avenue, Long Island, is practically completed for the two southerly tunnels. In the most northerly tunnel about 360 linear feet remain to be done immediately east of the Long Island City shafts, and in the tunnel immediately south of this a bottom heading has been opened up to the shaft and about 230 feet of top heading remain excavated.

From East avenue to Thompson avenue a small amount of work has been completed, consisting of a section of the most northerly line about 150 feet long and excavation for north abutment of Hunter's Point avenue bridge.

Excavation has been begun for the yard in Long Island City, known as "Sunnyside Yard," 6 per cent. of the entire amount of excavation being completed.

HUDSON AND MANHATTAN COMPANY'S TUNNELS.

The following is the work done during the six months ending June 30, 1907, on the two tunnel railroads of the Hudson and Manhattan Railroad Company, known as the New York and Jersey Railroad Division, from Hoboken to Manhattan, and the Hudson and Manhattan Railroad Division, from Jersey City to Manhattan.

NEW YORK AND JERSEY RAILROAD DIVISION.

On the river tunnels ballasting and track laying have commenced. The construction of the electrical conduits and the interior fitting up of these tunnels are largely completed.

The station at Christopher and Greenwich streets and stairway construction into private property is completed, the only work remaining to be done being the interior treatment of this station.

Electric conduit construction is in process of execution between the shaft at the foot of Morton street and the station at Christopher and Greenwich streets.

Construction of electrical sub-station on private property at Christopher and Greenwich streets has been rapidly prosecuted.

Construction of crossover between the twin-tube tunnels west of Greenwich avenue station, now completed, has been effected by underground methods without breaking through the street surface.

The underground station at Christopher street and Greenwich avenue is actively under way, and rapid progress is being made by underground methods without opening the street surface.

Work on the Sixth avenue extension is being vigorously pushed. From Greenwich avenue to a point about 100 feet south of the centre line of Twelfth street, the westbound tunnel has been extended, by the shield method, under Sixth avenue a distance of 480 feet, at which point it has been found necessary to suspend operations until the completion of the southerly extremity of the work, now being rapidly advanced. The eastbound tunnel, also under Sixth avenue, has been extended, by the shield method, under Christopher street and Sixth avenue a distance of 764 feet to a point about 50 feet south of the centre line of Tenth street, which work is in active progress.

The eastbound tunnel of the Ninth street branch has been started. A cross-heading has been carried across Ninth street into private property on the corner of Sixth avenue and Ninth street, at which point a shaft and operating plant is being installed to be used in the construction of the Ninth street branch tunnels.

The subway on Sixth avenue, between Twelfth street and Thirty-third street, is now under construction and progressing with all possible speed. The street is being maintained for use by planking over the surface, and the elevated structure and surface railway tracks are well supported, the excavation and construction of this subway going on beneath this planked surface.

HUDSON AND MANHATTAN RAILROAD DIVISION.

Work has been actively carried on from Jersey City by construction of the tunnels under the river, and has been advanced into the State of New York with both the eastbound and westbound tunnels. During the period named the eastbound tunnel has progressed within the State of New York, between

Jersey City and Cortlandt street, 550 feet, and the westbound tunnel, between Jersey City and Fulton street, 526 feet.

Work on the approaches under Cortlandt street and Fulton street has been actively prosecuted, sewers and other public improvements under the streets have been diverted, and practically all adjacent buildings have been underpinned to secure foundations. Streets have been decked over the entire area of the approach work, and the caisson construction of the approaches themselves has been actively carried on, excavation having been made to an average depth below the surface of the street of 17 feet, and up to June 30, two of the caissons have been sunk under Cortlandt street and three under Fulton street.

The entire dam enclosing the complete station has been finished, the caissons for the dam having been sunk through hardpan to bedrock and sealed on the same, and the interior caissons have been sunk, in which to erect the columns for the station and building construction. The permanent steel construction has been actively started, and up to June 30, some five thousand tons of steel have been erected.

PROPOSED CHANGES OF TRACKS NORTH OF 96TH STREET.

At the beginning of operation of trains in the subway, it became evident that the switching facilities at the Ninety-sixth street junction of the east and west side branches of the subway, would, as these branches were fully developed, be a cause of congestion of the train service at this point. It would, more or less, seriously prevent the development of the road to its full capacity.

Mr. E. P. Bryan, Vice-President of the Interborough Rapid Transit Company, in a letter dated May 14, 1906, to Mr. Alexander E. Orr, President of the Rapid Transit Board, directed attention to the above matter as follows:

"With reference to the increased local service during rush hours, it would be impracticable to increase the running time and to inject additional trains beyond the capacity of the Ninety-sixth street junction switches."

The question came up again later in the year when a demand was made for operating the Broadway third track for express service north of the One Hundred and Third street station, and thus run additional through express trains south to and through the Ninety-sixth street station.

Under date of November 15, 1906, the chief engineer reported, in part, as follows, on conditions then prevailing:

"On both the Broadway and Lenox avenue branches, southbound trains, during what are termed the 'rush hours,' are run on a two-minute schedule: the trains being alternately local and local express trains, the latter being trains that continue as express trains only south of 96th street. This provides for the arrival of a train at 96th street every minute from the north. Half of these trains, the Broadway express and the Lenox locals, have to cross over in order to reach their proper running tracks to and south of 96th street. This results in a congestion of trains waiting to enter the station sometimes as far north as 116th street on Broadway."

In this report the chief engineer advises the construction of additional tracks north of Ninety-sixth street in order to avoid to a certain extent crossings at grade.

Elevated Railroad Construction, Three Tracks, on Broadway in The Bronx.

This was followed by negotiations with the Interborough Company and the consideration of various plans, some of which would only partially avoid crossings at grade; others, however, at a greater estimated cost, would obviate entirely such crossings. It was not until April, 1907 that a satisfactory arrangement was agreed upon, as is shown by the following abstracts from the minutes of the Board:

"*April* 3, 1907.

HON. JOHN H. STARIN, *Vice President, Rapid Transit Board:*

DEAR SIR:— You will remember that in the fall of 1906 the Rapid Transit Board discussed the traffic conditions north of the Ninety-sixth street station, and it was evident that some plan should be adopted which would remedy the congested condition at this place. Since then the engineers of the Board have been in consultation with the officials of the Interborough Rapid Transit Company, and, after a prolonged discussion of this matter, a plan has been agreed upon involving the construction of two additional tracks on the west side of the present subway and one track on the east side, together with crossovers, this construction extending from Ninety-sixth street to One Hundred and Third street. This plan would effectively relieve the situation, and the estimated cost of the work is about $850,000. I submit herewith blue print of our drawing, No. 1715-A, showing the general layout of the subway at this point and the new additional tracks necessary to carry out this scheme.

The Interborough Company have expressed a willingness to undertake the construction of these additional tracks, as stated in a letter received from Mr. E. P. Bryan, president of the company, dated March 27, 1907, copy of which I enclose herewith.

I respectfully recommend to the Board the favorable consideration of the above-mentioned plan.

Very truly yours,
(Signed) GEORGE S. RICE,
Chief Engineer."

"INTERBOROUGH RAPID TRANSIT COMPANY,
Nos. 13 to 21 Park Row.

NEW YORK, *March* 27, 1907.

MR. GEORGE S. RICE, *Chief Engineer, Rapid Transit Commission, New York City:*

DEAR SIR:— I beg to acknowledge receipt of your letter of this date, with one print of your drawing 1715-A, showing proposed additional tracks between West Ninety-sixth and One Hundred and Third streets. This is the plan agreed upon in my office between you, your engineers, our engineers and me.

I have taken this subject up with our board to-day, and our people are willing to carry out the work as provided on this plan, it being the understanding that it is to be treated as an extra under Contract No. 1. You will please take this matter up with your Board and advise me if such is the understanding.

Yours truly,
(Signed) E. P. BRYAN,
President."

The above correspondence was referred to the counsel of the Board, who advised the steps necessary to bring about the proposed changes.

After further correspondence with the Interborough Company, and the expression of a desire on the part of that company to proceed with the work

in accordance with the plans agreed upon, the following resolution was passed by the Board on June 13, 1907:

"RESOLVED, That Counsel and Chief Engineer be and they hereby are authorized to prepare form of resolutions, with maps and plans, for amending the original route and plans of the Rapid Transit Railroad between Ninety-sixth street and One Hundred and Third street, in Broadway."

Finally, on June 27, the Board authorized the execution of an agreement for carrying out the proposed changes, as follows:

"WHEREAS, This board did, on the 14th day of January, 1897, and 4th day of February, 1897, adopt certain routes and general plan for a rapid transit railroad in the city of New York, a copy of which is hereto annexed entitled 'Copy Routes and General Plan;' and

WHEREAS, The said routes and general plans were afterward duly approved by the municipal authorities of the city of New York, and were duly consented to by commissioners appointed by the Appellate Division of the Supreme Court, which consent was duly confirmed by the said Appellate Division, in lieu of the consent of the owners of a majority in value of the property along said routes; and

WHEREAS, Thereafter, and on or about the 21st day of February, 1900, the city of New York did by this Board enter into a certain contract with John B. McDonald for the construction and operation of said rapid transit railroad; and

WHEREAS, By written instrument bearing date the 10th day of July, 1902, the said John B. McDonald, with the written consent of this Board, concurred in by six members, thereof, duly assigned the right or obligation to maintain and operate the said rapid transit railroad for the term of years specified in the said contract and all rights included in the leasing provisions of the said contract, together with the obligation to provide equipment for the said railroad, unto Interborough Rapid Transit Company, which company also guaranteed the performance by the said John B. McDonald, as such contractor, of the provisions of his said contract not so assigned to it; and

WHEREAS, It is the interest of the city of New York, and in the opinion of the said Interborough Rapid Transit Company, it is likewise in its interest as such lessee, and it desires that said routes and general plan shall be changed in the respect hereinafter mentioned, but without other change in the said routes and general plan; now therefore it is

RESOLVED, That, subject to the consents and approvals to be first obtained as in these resolutions hereinafter mentioned, the said routes and general plan heretofore adopted by this Board be and they hereby are modified by adding to the said routes the following, to-wit:

'And also an additional track extending along the easterly side of Broadway from a point near the centre line of Ninety-sixth street to a point about seventy-five (75) feet north of the northerly line of One Hundred and Second street. The said easterly additional track is more particularly described as follows:

'A track the centre line of which shall begin at or near a point where the centre line of Ninety-sixth street intersects the centre line of the easterly track as originally constructed upon this route; thence diverging from the said easterly track originally constructed and running northeasterly and northerly and generally parallel with the easterly line of Broadway, and distant therefrom not less than twenty-four (24) feet nine (9) inches, and so continuing to a point near the southerly line of One Hundred and Second street; and thence curving northwesterly and again uniting with the said easterly track of the railroad as originally constructed upon this route at a point about seventy-five (75) feet north of the northerly line of One Hundred and Second street.

'Also two additional tracks extending along the westerly side of Broadway from a point near the centre line of Ninety-sixth street northerly to a

point near the centre line of One Hundred and First street. The said two tracks are more particularly described as follows:

'*First.* A track, the centre line of which shall begin at or near the point where the centre line of Ninety-sixth street intersects the centre line of the westerly track as originally constructed upon this route; thence diverging from the said westerly track originally constructed and running northwesterly and northerly generally parallel with the westerly line of Broadway, and distant therefrom not less than twenty-four (24) feet nine (9) inches, to a point about fifty (50) feet south of the southerly line of One Hundredth street; and thence curving northeasterly, and again uniting with the said westerly track as originally constructed upon this route, at a point near the intersection of the centre line of the said westerly track with the centre line of One Hundred and First street.

'*Second.* A track, the centre line of which shall diverge from the centre line of the additional track last above described at a point about twenty (20) feet south of the northerly line of Ninety-sixth street; and thence running northerly and parallel, or nearly so, with the westerly line of Broadway, and distant about forty (40) feet therefrom, to a point about fifty (50) feet north of the northerly line of One Hundredth street; and thence curving northeasterly and continuing to a point near the intersection of the centre line of One Hundred and First street with the centre line of the lower westerly track originally constructed upon this route, and known as the southbound Lenox avenue track.

'And also spurs or connections to unite the said three additional tracks, or any one or more of them, with any of the other tracks constructed upon this route.

'The additional tracks, spurs and connections herein provided for, above described, shall be built (except where the same curve to unite with or diverge from any of the four tracks first constructed upon this route) between the walls of the railroad or subway, and the easterly and westerly sides of Broadway, respectively.

'The additional track on the easterly side shall descend from a point at or near the centre line of Ninety-seventh street at a grade of about 1 per cent. to a point about forty (40) feet north of the centre line of Ninety-ninth street, and thence level to a point which is about thirty-five (35) feet below the surface of Broadway and near the southerly line of One Hundredth street, at which point a spur or connection shall diverge to connect with other tracks. Said easterly additional track as above described shall from said lowest point ascend to about the centre line of One Hundred and Second street, and shall continue thence on the same grade as the easterly line originally constructed upon this route, which is known as the northbound Broadway track.

'The first of the two additional westerly tracks shall be constructed upon the same grade as the westerly track first constructed upon this route, which is known as the southbound Broadway track.

'The second of the said two additional westerly tracks shall continue on the same grade as the first of the said additional westerly tracks from the point of beginning, as above described, to a point near the intersection of the centre line of Ninety-eighth street; from thence it shall descend to a point about the northerly line of One Hundredth street, at which it will be on the same grade as the two centre tracks first constructed upon this route, known as the Lenox avenue tracks; and from thence it shall continue on the same grades as the said two Lenox avenue tracks.'

In all other respects the provisions of the said general plan of construction adopted January 14 and February 4, 1897, as heretofore amended, shall be applicable to the portion of the route hereinabove mentioned; and it is further

RESOLVED, That, whereas this board has duly made the inquiries and investigation necessary or proper in the premises and has determined that the modification aforesaid of the said routes and general plan are necessary for the interests of the public and of the city of New York, and should be established as herein provided, this Board does hereby determine and establish

the said routes and general plan as hereby modified, subject to the consents and approvals to be first obtained as hereinafter mentioned; and it is further

RESOLVED, That the said modifications of the routes and general plans shall take effect only upon and after the following consents and approvals thereto shall be duly had, to-wit:

1. The consent of the Board of Estimate and Apportionment of the city of New York as the local authority having control of the streets above mentioned.

2. The consent of the mayor of the city of New York.

3. The consent of the owners of a majority in value of the property along that portion of Broadway in the borough of Manhattan, which is included in the portion of the routes added as aforesaid; or, if such consents cannot be obtained, then, in lieu thereof, the determination of three commissioners to be appointed by the Appellate Division of the Supreme Court, duly confirmed by the said Appellate Division.

4. The consent of the said John B. McDonald, contractor, and of his sureties, as follows: Rapid Transit Subway Construction Company, the United States Fidelity and Guaranty Company, the Empire State Surety Company, American Surety Company of New York, National Surety Company and Fidelity and Deposit Company of Maryland; and also Interborough Rapid Transit Company; it is further

RESOLVED, That this board hereby adopts the drawing now produced and entitled 'Board of Rapid Transit Railroad Commissioners of the City of New York; proposed additional tracks between West Ninety-sixth and West One Hundred and Third streets. Drawing No. 1715-B, June 24, 1907,' as showing in general the additions to and modifications of the original routes and general plan hereby adopted."

The tracks as at present constructed consist of four tracks on the same level at Ninety-sixth street; the centre tracks being express, and the outside tracks being local. Following north from the Ninety-sixth street station, for the West Farms branch, both local and express trains take the centre tracks, necessitating the switching of the northbound local trains to the central tracks, and the West Farms express trains continue north as locals on this same track. These tracks continue to the north, turning to the east under One Hundred and Fourth street, passing under the present east side Broadway track.

Again following north from the Ninety-sixth street station the Broadway trains, both local and express, take the outside track, necessitating the switching of the Broadway express trains to the northbound local track, and also running the northbound locals on the same track.

These conditions, as above described, refer to the northbound traffic, and the same conditions exist on the west side in reference to the southbound traffic.

This method of operation is clearly unsatisfactory; a simple illustration being — a southbound Broadway express and a southbound West Farms local reaching the switch at about the same period, one is blocked to permit the other to cross to its proper track to the station; and this condition multiplies with the very slightest disarrangement of the schedule time for operation.

It is proposed by the modified plan to add an additional track on the east side that will take the local trains outside of the present subway to about One Hundred and First street, the Broadway local continuing north and entering the present subway again just south of One Hundred and Third street, while the West Farms local will turn into the present northbound track at

Working Platform, Contract 9-0-2, Canal St.

about One Hundred and First street, the northbound express trains running on the tracks as at present arranged, thus avoiding the crossover just north of the station.

On the west side two additional tracks are proposed. The southbound west side track will branch at about One Hundred and First street and provide for an independent Broadway local track to the Ninety-sixth street station, while the present track will serve for the southbound Broadway express. At or about the same point near One Hundred and First street, on a lower level, the southbound West Farms track will branch, providing for a local service outside of the present subway tracks to the Ninety-sixth street station, while the present track will accommodate the southbound West Farms express service, thus again avoiding the direct crossover of the southbound tracks north of the Ninety-sixth street station.

WEST SIDE TRACKS N. Y. C. & H. R. R. R.

The engineering department in 1906 made careful studies for a subway along Eleventh avenue, West street and other streets in Manhattan borough, in accordance with an act of the Legislature which became a law on March 26, 1906, entitled:

"An act to terminate the use of streets, avenues and public places in the city of New York, in the borough of Manhattan, by railroads operated by steam locomotive power at grade."

It was therefore obligatory on the part of the Rapid Transit Board that if by March 26, 1907, no agreement had been reached with the New York Central & Hudson River Railroad Company, to which company this act applied, to place its tracks in a subway on the west side of Manhattan, condemnation proceedings would be instituted. As no agreement was reached by the date mentioned, surveys to carry out the purpose of the act were started and are now being made.

On June 30, 1907, there were 328 appointments in force on the staff of the chief engineer, divided as follows:

1 Deputy Chief Engineer.
5 Division Engineers.
3 General Inspectors.
115 Assistant Engineers.
33 Draughtsmen.
54 Rodmen.
33 Axemen.
10 Inspectors of Steel.
45 Inspectors of Masonry.
5 Cement Testers.
1 Steel Chemist.
2 Computers.
1 Secretary.
19 Clerks.
1 Photographer.

The engineering executive staff on June 30, 1907, consisted of the following officers:

Alfred Craven, Deputy Chief Engineer.
George Hallett Clark, Engineer First Division.
John H. Meyers, Engineer Second Division.
C. V. V. Powers, Engineer Third and Fourth Divisions.
Frederick C. Noble, Engineer Fifth Division.
Amos L. Schaeffer, Engineer Sewer Division.
Sverre Dahm, General Inspector of Designs.
W. A. Aiken, General Inspector of Material.
D. L. Turner, General Inspector of Stations.
M. J. Farrell, Secretary to Chief Engineer.
Pierre P. Pullis, Official Photographer.
Heins & LaFarge, Consulting Architects.
Latey & Slater, Consulting Electrical Engineers.

As the engineering corps of the Rapid Transit Board, as such, practically ceases to exist, I take this opportunity of thanking the executive staff and the entire force for their efficiency and loyalty in carrying out the work. The force was organized in 1900, and is an excellent example of how civil service intelligently and honestly conducted, can be used in carrying on a large public enterprise. The work has been arduous, and the success achieved is due almost entirely to the confidence on the part of the Rapid Transit Board in its technical employees and their assistants.

I thank the Rapid Transit Board for its uniform courtesy and kindness in complying with the many recommendations made by myself as Acting and Chief Engineer, and for the confidence shown at all times in the work of the Engineering Department.

Respectfully submitted,
(Signed) GEORGE S. RICE,
Chief Engineer.

APPENDIX B.

REPORT OF HENRY B. SEAMAN ON RAPID TRANSIT MATTERS.

APPENDIX B.

REPORT OF HENRY B. SEAMAN ON RAPID TRANSIT MATTERS.

NEW YORK, *January* 1, 1908.

WILLIAM R. WILLCOX, *Chairman, Public Service Commission for the First District.*

SIR:— I hereby respectfully present to you a report upon the work of the engineering department of your Commission, from July 1 to December 31, 1907.

The work which was formerly under the jurisdiction of the Rapid Transit Board, and which by succession devolves upon your Commission, may be briefly outlined as follows:

In March, 1900, contract No. 1, known as the Manhattan-Bronx Railroad, was executed by the city of New York, through the Rapid Transit Board, and has been practically completed and in full operation for some time. The original contract contemplated ending the road at Kingsbridge station, but since that time the road was extended up Broadway to Van Cortlandt Park. The station at the northern terminus of the east side branch still remains to be completed.

In 1902, an extension of the subway, known as contract No. 2, was continued from the Postoffice in Manhattan southerly down Broadway, under the East river, to the Borough of Brooklyn, through Joralemon and Fulton streets, and Flatbush avenue to the Long Island station at the junction of Fourth and Atlantic avenues in Brooklyn. The portion of this contract lying in the borough of Manhattan has been in operation since January, 1905.

The tunnel under the East river is just being completed, and the subway extending easterly to the Long Island station will probably be ready for operation in the coming spring, the contract time for its completion being May 8, 1908.

In connection with the closing activities of the Rapid Transit Board, contracts were let in Manhattan for what is termed the Brooklyn Loop Lines, a four track road of complicated design, connecting the Manhattan terminals of the Williamsburg, the Manhattan and the Brooklyn bridges. These contracts involve an expenditure of about $10,000,000, and were barely commenced when this Commission assumed office.

In the last few months of the Rapid Transit Railroad Commissioners' tenure of office, plans were authorized for a subway in the borough of Brooklyn, from the Manhattan Bridge approach, through Flatbush avenue to Fourth avenue and thence to Fort Hamilton, with a connection at Fortieth street easterly to Coney Island, and an appropriation of $23,000,000 was made therefor by the Board of Estimate and Apportionment.

In accordance with an act of the Legislature of 1906, the Rapid Transit

Board was ordered to study the problem of the elimination of the tracks of the New York Central and Hudson River Railroad, where they were laid at grade in the public streets and highways. The act contemplated the condemnation of this railroad property in the streets and highways, if plans for a satisfactory removal were not agreed upon by March, 1907. On May 14, 1907, the engineering force began surveys, preparatory to the condemnation of this property. These surveys and the necessary maps have been completed, and the corporation counsel now has the matter of condemnation proceedings in hand.

In addition to the work on contract No. 1, the Rapid Transit Board, at its meeting just before going out of office, completed the contract for the building of additional tracks between Ninety-sixth street and One Hundred and Third street on Broadway. The tracks will be so arranged that the congestion which has existed, because of the complicated system of switches and crossings at grade just north of Ninety-sixth street, will be obviated. At the same meeting of the Board, provision was made for additional ventilation of the subway, between Ninety-sixth and One Hundred and Forty-fifth streets.

The work enumerated above may be briefly reviewed in detail as follows:

CONTRACT NO. 1.

A few minor details on sections named below remain to be completed, which, however, do not affect the railroad, as a whole, in its continuous operation.

Section 9-B.— From the centre line of Gerard avenue to the west building line of Brook avenue and Westchester avenue.

To complete this section, some station finish work remains to be done at the Mott avenue station.

At the Third avenue station, changes have been made for two new stairways, made necessary by the widening of Third avenue, in the vicinity of One Hundred and Forty-ninth street. This work was begun on July 25, 1907 and is nearing completion.

The Gerard street approach which required treatment of the plaza to complete it, and upon which work was begun on October 9, 1907, is now finished.

Sections 13 and 14.— From the north building line of One Hundred and Thirty-third street to Hillside avenue, at Fort George.

Work on those sections is practically complete, with the exception of some minor details in connection with the stations at One Hundred and Sixty-eighth and One Hundred and Eighty-first streets.

Section 15.— Viaduct from Fort George northerly to the Bronx at Kingsbridge.

The electric wiring of the Ship Canal bridge has been completed, and corrugated iron ceilings placed in the machinery rooms of the draw span. Considerable electric cable work has been done south of the bridge, and some track work, painting, etc. The temporary station at Two Hundred and Thirtieth street, the northerly limit for the operation of trains, is still being used.

Van Cortlandt Park Extension.— From Two Hundred and Thirtieth street, near Spuyten Duyvil creek, to Two Hundred and Forty-second street and Broadway.

The foundations, with the exception of the one at Two Hundred and Thirty-first street, have been completed for this elevated structure. Erection of the main structural steel has been practically completed to the end of the line at Two Hundred and Forty-second street, but has been riveted only as far as about Two Hundred and Thirty-eighth street. No station steel work has been erected, except a small amount at the Two Hundred and Forty-second street station. The decking, the tracks and the hand railings are practically complete to about Two Hundred and Thirty-eighth street, and all cast-iron fenders are set and concreted.

All of the steel required for the Two Hundred and Forty-second street station has been delivered, and also a considerable part of the steel for the Two Hundred and Thirty-first street and the Two Hundred and Thirty-eighth street stations.

The total amount of money expended on account of contract No. 1, since the beginning of construction to December 31, 1907, approved on vouchers, has been as follows:

	1900.	1901.	1902.	1903.
Regular work	$1,685,000	$10,343,000	$11,436,000	$6,930,000 00
Extra work	.....	162,000	631,000	2,563,021 47
Total	$1,685,000	$10,505,000	$12,067,000	$9,493,021 47

	1904.	1905.	1906.	1907.	Total.
Regular work	$3,220,000 00	$869,000	.....	.....	$34,483,000 00
Extra work	932,304 61	4,950	$6,000	$1,241,437 43	5,540,713 51
Total	$4,152,304 61	$873,950	$6,000	$1,241,437 43	$40,023,713 51

Tables annexed give the quantities of regular and extra work performed by each sub-contractor from the beginning of construction to December 31, 1907, inclusive.

CONTRACT No. 2.

The following is the progress of work on contract No. 2, on such portions of this contract not yet completed, as indicated by sections given below.

Section 2.— Battery Loop, Bowling Green to South Ferry.

This section, comprising the double-track loop, in Battery Park, is in full operation. The surface of a portion of the park continues to be occupied by the enclosure in which the contractor's plant and the tunnel shafts are located, and an additional section of the park outside the enclosure is used for the storage of materials for concrete. Wherever possible elsewhere over the loop the surface of the park has been restored.

Section 2-A.— South Ferry to Brooklyn, Joralemon street to Clinton street.

All tunneling operations on this section have been finished since March 1, 1907, the date of the meeting of the south shields under the river. The pile supports under the tubes where they passed through fine sand and were being driven, and the cast-iron lining of the tunnel was being made watertight, while the air pressure was maintained in both tubes. At Willow Place and at South Ferry, excavation for the ventilating shafts was in progress.

At the present time the calking of the lining is finished, the air pressure entirely removed from the tunnel, and the finishing work, consisting of lining the interior of the tubes with concrete, laying track and installing the signal system is completed.

The work of sinking concrete piles under the tubes in the fine sand formation, on the east side of the Brooklyn reef, was finished in July. In the mid-river section, between the Brooklyn reef and the Manhattan rock formation, seventeen concrete pile bents were sunk under the north tube and fifteen under the south. Each bent consists of two piles, twenty inches in diameter, spaced 7 feet apart transversely, and about 30 feet apart longitudinally, of the tunnel. The piles were driven to depths ranging from 5 to 40 feet. In the fine sand formation east of the Brooklyn reef fifteen similar pile bents were sunk in each of the tubes. The pile bents in this section are spaced about 50 feet apart longitudinally, extending to depths ranging from a few feet to 75 feet. In every case the piles were driven to hard material. To drive the piles it was necessary to remove the bottom plates at each location and force the piles down in sections by hydraulic jacks. When a firm bearing was reached the piles were connected at the top by a broad reinforced concrete cradle, and the cast-iron lining was replaced.

Since the removal of the air pressure the work of lining the tunnel with concrete has made rapid progress, so that it is now finished for the entire length of both tubes. The concrete lining of the roof is brought flush with the inside of the flanges wherever the tunnel is in rock, or under the land east of the bulkhead line in Brooklyn. For the remaining distance in soft material under the river the concrete lining is made sufficiently thick to cover the flanges three inches at upper quarter points, and further increased in thickness at the ground and spring line on each side by making the outline flat at these places. In this additional concrete steel reinforcing rods are embedded, which add greatly to the resistance of the tunnel section to deformation.

The sumps for collecting the drainage of the tunnel have been excavated in concrete-lined cross-passages at three places under the river. Each sump is

to be equipped with a pump, operated by compressed air, and these will discharge through two six-inch cast-iron drain pipes laid in the bottom of each tube to the permanent shafts on each side of the river, where connection with the sewers will be made. The drainage system may be said to be complete, except a small amount of work to be done in equipping the pumps in certain of the sumps; this, however, will not interfere with the operation of the tunnels.

There are two permanent shafts, one at South Ferry and one at Willow Place, Brooklyn, designed to serve as ventilating openings as well as connections for the drainage system and power cables. Since July the excavation for these shafts has been finished, and the concrete lining is well advanced. The working shaft at South Ferry has been enlarged for this purpose, while the Willow Place shaft was a new one, excavated under air pressure, and sealed to the outside of the tunnel shell. They are to be equipped with fans, electrically operated, and so arranged that the air may be moved in or out of either of the tubes. Under ordinary conditions it is expected that adequate ventilation will be obtained by the movement of air from the passage of trains through the tubes. The construction and equipment of the tunnel are now about completed.

The working shafts at Furman street, Brooklyn, have been closed and are being filled up.

Section 3.—Clinton street, Fulton street and Flatbush avenue to Atlantic avenue.

Although this section has been under construction three years and nine months, a large portion of this time has been lost by the change in the plans providing for additional tracks on Fulton street and Flatbush avenue. Work on the basis of the new plans has been in progress only a little over two years, and has been hampered by slow deliveries of steel and unusual difficulties, such as the construction of depressed tracks and the necessity of underpinning buildings and supporting the elevated railroad structure. Nevertheless without allowing for the delays due to the above causes, the progress of this section compares very favorably with the best progress made on any section of the subway in Manhattan.

In Joralemon street the structure including the interior finish of the Borough Hall station and the installation of tracks and the signal apparatus, has been completed. Street surface damage has been repaired, and an entirely new asphalt pavement has been laid from Clinton street to Fulton street.

In Fulton street the structure is complete within a short distance of Flatbush avenue, with the exception of the work on the ventilating chamber at DeKalb avenue, now in progress. The contractor has been instructed to close the shaft at this point, to remove the buildings, and to repave the street by the end of January. The interior finish work of the Hoyt street station is practically complete. Tracks have been laid and ballasted from Joralemon street east through Hoyt street station.

In Flatbush avenue progress has been rapid since the last shipments of steel were received early in the present year. A short section at the intersection of Flatbush avenue and Fulton street remains to be roofed over, and a small amount of excavation remains to be done at the site of the Atlantic avenue station. At both these points construction is actively in progress, and

in the intervening stretch the structure is practically finished. The work of repairing the surface damage and repaving is proceeding as fast as conditions permit.

The total estimates made for all work done on contract No. 2 to and including December 31, 1907, for which the contractor has received payment, are as follows:

Year 1903 — Regular work.	$202,457 06
Year 1904 — Regular work.	620,423 62
Year 1905 — Regular work.	491,504 53
Year 1905 — Extra work.	82,895 00
Year 1906 — Regular work.	314,718 97
Year 1906 — Extra work.	457,081 87
Year 1907, January 1 to June 30 — Regular work	80,058 02
Year 1907, January 1 to June 30 — Extra work	235,805 73
Year 1907, July 1 to Dec. 31 — Regular work	32,609 15
Year 1907, July 1 to Dec. 31 — Extra work.	156,768 05
Total.	$2,674,322 00

The total value of all work done to date, comprising both contract No. 1 and contract No. 2, is as follows:

Contract No. 1, regular.	$34,483,000 00
Contract No. 1, extra.	5,540,713 51
Contract No. 2, regular	1,741,773 35
Contract No. 2, extra.	932,550 65
Total.	$42,698,037 51

The following tables give the quantities of regular and extra work under all heads, as performed by each sub-contractor from the beginning of construction to December 31, 1907:

TOTAL AMOUNT OF CONTRACT WORK DONE ON CONTRACT No. 2, BY EACH SUBCONTRACTOR TO DECEMBER 31, 1907.

ITEM.	Quantity.	Section 1.	Section 2, Battery Park loop.	Section 2A East River tunnel.	Section 3.	Work Done During				Total work to date.
						1904.	1905.	1906.	1907.	
Earth excavation	Cubic yards	120,290	60,890	22,264	240,150	214,588	114,792	67,271	46,943	443,594
Rock excavation	Cubic yards	760	2,988	1,871	.....	4,047	843	548	181	5,619
Tunnelling	Cubic yards	.....	.....	119,958	.....	54,800	36,030	24,133	4,995	119,958
Portland cement concrete	Cubic yards	20,812	19,233	7,510	37,914	35,237	20,724	17,509	11,999	85,469
Steel erected	Tons	2,162	1,230	985	3,795	3,269	1,948	1,858	1,097	8,172
Cast iron erected	Tons	211	33	29,213	157	9,591	10,577	5,099	4,347	29,614
Brick masonry (common)	Cubic yards	1,615	.....	.....	4,063	1,881	1,112	1,982	703	5,678
Restoring street surface and repaving	Square yards	12,753	3,658	.....	8,341	.....	16,330	6,613	1,809	24,752
Restoring park surface	Square yards	1,207	2,072	611	.....	.....	1,798	2,092	.....	3,890
Vault lights	Square yards	1,504	212	.....	2,055	.....	1,716	341	1,714	3,771
Steel delivered	Tons	2,162	1,230	1,032	4,985	.....	6,297	1,748	1,364	9,409
Cast iron delivered	Tons	211	33	29,213	239	.....	24,618	3,669	1,409	29,696
Sumps and pumps	Number	.....	1	3	.....	.....	1	.....	3	4
Waterproofing	Square yards	39,224	24,691	6,046	35,521	.....	78,550	15,545	11,387	105,482
Brick in asphalt	Square yards	8 433	17,770	5,918	18,150	.....	35,336	8,622	6,313	50,271
Concrete above waterproofing	Cubic yards	.....	919	183	33	.....	951	184	.....	1,135
Grouting	Cubic yards	.....	.....	2,127	.....	.....	798	327	1,002	2,127
Beton	Cubic yards	.....	.....	10,068	.....	.....	2,481	1,146	6,441	10,068
Ducts laid single	Linear feet	178,613	33,217	175,329	283,727	.....	338,027	108,077	224,782	670,886
Empire City ducts	Linear feet	32,505	.....	.....	.....	.....	32,505	.....	.....	32,505
Edison ducts	Linear feet	16,155	.....	.....	.....	.....	15,659	496	.....	16,155
Western Union tubes	Linear feet	2,811	.....	.....	.....	.....	3,196	385	.....	2,811
Expended on stations	Dollars	106,894	16,494	.....	65,267	.....	92,829	29,735	66,091	188,655
Main line track	Linear feet	6,731	3,508	14,400	6,301	.....	6,731	.....	24,209	30,940
Turnouts and cross-overs	Linear feet	230	592	.....	261	.....	230	.....	853	1,083
Water pipes, 24-inch	Linear feet	.....	.....	.....	3,480	.....	3,480	.....	.....	3,480
Water pipes, 20-inch	Linear feet	2,542	.....	.....	.....	.....	2,794	252	.....	2,542
Water pipes, 16-inch	Linear feet	158	.....	.....	.....	.....	158	.....	.....	158
Water pipes, 12-inch	Linear feet	2,267	.....	.....	406	.....	2,534	139	.....	2,673
Water pipes, 10-inch	Linear feet	88	.....	.....	.....	.....	88	.....	.....	88
Water pipes, 6-inch	Linear feet	869	.....	.....	.....	.....	869	.....	.....	869
Gas pipes, 24-inch	Linear feet	2,265	.....	.....	.....	.....	2,314	49	.....	2,265
Gas pipes, 20-inch	Linear feet	260	.....	.....	185	.....	445	.....	.....	445

TOTAL AMOUNT OF CONTRACT WORK DONE ON CONTRACT NO. 2, ETC.— *Continued.*

ITEM.	Quantity.	Section 1.	Section 2, Battery Park loop.	Section 2A East River tunnel.	Section 3.	WORK DONE DURING				Total work to date.
						1904.	1905.	1906.	1907.	
Gas pipes, 16-inch	Linear feet	1,490	.....	.....	.....	.....	1,459	31	.....	1,490
Gas pipes, 12-inch	Linear feet	2,325	.....	.....	139	.....	2,204	260	.....	2,464
Gas pipes, 10-inch	Linear feet	119	.....	.....	5	.....	124	.....	.....	124
Gas pipes, 8-inch	Linear feet	109	.....	.....	121	.....	230	.....	.....	230
Gas pipes, 6-inch	Linear feet	2,029	.....	.....	95	.....	2,117	7	.....	2,124
Gas pipes, 4-inch	Linear feet	148	.....	.....	.....	.....	148	.....	.....	148
Drain pipes, 8-inch	Linear feet	.....	1,119	.....	.....	.....	1,077	42	.....	1,119
Drain pipes, 6-inch	Linear feet	1,205	910	21,526	19	.....	1,903	648	21,109	23,660
Drain pipes, 4-inch	Linear feet	162	.....	.....	45	.....	130	32	45	207
Drain pipes, 3-inch	Linear feet	395	.....	.....	1,028	.....	374	21	1,028	1,423
Steam pipes, 15-inch	Linear feet	315	.....	.....	.....	.....	315	.....	.....	315
Steam pipes, 10-inch	Linear feet	417	.....	.....	.....	.....	417	.....	.....	417

TOTAL EXTRA WORK ON SECTION 3, CONTRACT NO. 2, DUE TO FOURTH TRACK AND CONNECTIONS.

ITEM.	Quantity.	Work done during 1905.	Work done during 1906.	Work done during 1907.	Total extra work to date.
Earth excavation	Cubic yards	14,664	80,302	43,660	138,626
Portland cement concrete	Cubic yards	869	9,591	15,462	25,922
Steel erected	Tons	71	877	1,620	2,568
Steel delivered	Tons	290	2,138	1,218	3,646
Brick masonry (common)	Cubic yards	.....	338	314	652
Restoring street surface	Square yards	.....	858	1,552	2,410
Waterproofing	Square yards	.....	8,479	11,594	20,073
Brick in asphalt	Square yards	.....	5,981	7,804	13,785
Ducts laid (single)	Linear feet	.....	31,604	.....	31,604

WORK OF SEWER DIVISION.

All sewer work on contract No. 1, Manhattan-Bronx Railroad, has previously been reported as completed. On contract No. 2, Brooklyn-Manhattan Railroad, considerable progress has been made on longitudinal sewers, and the lateral sewers are being brought to a state of completion.

On June 16, 1907, sewer construction was begun on route 9, Brooklyn loop lines. Since then the sewer work on the contracts let for sections 9-0-1, 9-0-2 and 9-0-5 of this subway loop has been going on rapidly and satisfactorily. At the request of the contractor, it was agreed to substitute a new invert in the existing 5′ 6″ x 6′ 0″ sewer for the new 4′ 9″ circular sewer called for in the contract for section 9-0-1. This invert will serve the same purpose as the new sewer specified in the contract, and, moreover, has the advantage of being expeditiqusly and cheaply constructed without interference with traffic.

That portion of the 7-ft. circular sewer on the north side of Canal street between Baxter and Mott streets on section 9-0-2 is to be built just outside of the neat line of excavation for the future Canal street extension of the subway, the intention being that this sewer shall remain undisturbed when the extension is being built.

Owing to limited space for the construction of the 7-ft. circular sewer between the outside line of the future subway wall and the building line, the section of the sewer between Mulberry and Mott streets has been changed by designing a special reinforced concrete section which will conform to the available space between the waterproofing line of the future subway and the building line.

The 7-ft. circular sewer and the special section on the north side of Canal street will be constructed in tunnel. On October 14, 1907, a shaft was started at Baxter and Canal streets, and, shortly after, a second shaft was started at Mott and Canal streets. Work on these shafts has been progressing rapidly, and tunnel excavation for the sewers will be started in the near future. By reason of the peculiar difficulties connected with this work, constant inspection and instrumental measurements of the adjoining buildings are necessary in order to detect any injuries or settlement which the work might cause.

The following tables give the linear feet of sewers built on contract No. 2, Brooklyn-Manhattan Railroad, and on the contracts for construction of sections of the Brooklyn Loop Lines, from July 1 to December 31, 1907, and also the lengths of sewer remaining to be built:

DETAILS OF LATERAL SEWERS TO DECEMBER 31, 1907 — CONTRACT NO. 2.

LOCATION.	Sub-contractor.	Date begun.	Size.	Lin. feet completed from July 1, to Dec. 31, 1907.	TOTAL LIN. FT. COMPLETED TO DECEMBER 31, 1907.				TO BE COMPLETED.		Lin. feet original contract not built, to be abandoned.	OLD SEWER REMOVED.	
					PERMANENT.		BUILT AND ABANDONED.						
					Original contract.	Modified contract.	Removed.	To be removed.	Original contract.	Modified contract.		Lin. feet.	Size.
Fulton st., Manhattan.....	James Pilkington..	April 21, 1903	3'6"x 2'4" brick	.....	314	.....	.....	.....	.....	.....	.....	5	3'6"x 2'4" brick
Malden lane, Manhattan.....	James Pilkington..	Mar. 2, 1903	3'6"x 2'4" brick	.....	332	.....	.....	.....	.....	.....	.....	332	4'5"x 5'5" brick
			3'0"x 2'0" brick	.....	10	.....	.....	.....	.....	.....	.....	10	3'0"x 2'0" brick
Totals.....	.....	.....	.....	.....	342							342	
State st., Manhattan.....	James Pilkington..	Nov. 8, 1902	4'0"x 3'0" brick	.....	336	.....	.....	.....	.....	.....	.....	250	4'0"x 3'6" brick
Court st. at Joralemon st., Brooklyn.	Cranford & McNamee.	July 10, 1906	3'6"x 2'4" brick	.....	105	.....	.....	.....	.....	.....	.....	115	24"x 18" brick
			20" C. I. pipe..	.....	12	.....	.....	.....	.....	.....	.....	.....	.....
			18" C. I. pipe..	.....	12	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	.....	.....	.....	.....	129							115	
Joralemon st. at Borough Hall, Brooklyn.	Cranford & McNamee.	Mar. 21, 1903	12" vit. pipe...	.....	185	.....	.....	.....	.....	.....	.....	75	12" vit. pipe
Lafayette and Fleet sts., Brooklyn.	Cranford & McNamee.	Oct. 9, 1905	3'6"x 2'4" brick	.....	.....	973	.....	.....	.....	.....	.....	836	12" vit. pipe
			24" C. I. pipe..	.....	.....	63	.....	.....	.....	.....	.....	.....	.....
Totals.....	.....	.....	.....	.....	.....	1,036						836	
Hudson ave., Brooklyn.....	Cranford & McNamee.	Mar. 30, 1903	4'6"x 3'0" brick	40	2,322	40	.....	.....	.....	22	.....	480	3'6"x 2'4" brick
			30" C. I. pipe..	84	.....	84	.....	.....	.....	.....	.....	745	15" vit. pipe
			42" C. I. pipe..	.....	.....	.....	.....	24	.....	.....	.....	.....	.....
			4'6"x 1'4" steel box.....	26	.....	26	.....	.....	.....	.....	.....	966	12" vit. pipe
			15" vit. pipe...	.....	30	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	.....	.....	.....	150	2,352	150		24		22		2,191	

Nevins and Livingston sts., Brooklyn.	Cranford & McNamee.	Mar. 6, 1906	3'6"x 2'4" brick	.....	.....	252	.....	.....	.....	3	.....	282	12" vit. pipe
												28	15" vit. pipe
			18" vit. pipe...	.....	.....	359	.....	.....	.....	6	.....	247	3'0"x 2'0" brick
Totals.....	.....	.....	.....	.....	.....	611				9		557	
Flatbush ave. at Fourth ave., Brooklyn.	Cranford & McNamee.	Oct. 18, 1906	15'0" cir. brick.	.....	.....	270	.....	.....	.....	22	.....	112	15'0" cir. brick
Ashland place, Brooklyn.....	Cranford & McNamee.	.....	6'0" cir. brick..	.....	.....	.....	.....	.....	1,072	.....	1,072	.....	.....
			6'0"x 4'0" brick	.....	.....	.....	.....	.....	255	.....	255	.....	.....
			60" C. I. pipe..	.....	.....	.....	.....	.....	12	.....	12	.....	.....
			36" C. I. pipe..	.....	.....	.....	.....	.....	420	.....	420	.....	.....
			18" vit. pipe...	.....	.....	.....	.....	.....	20	.....	20	.....	.....
Totals.....	.....	.....	.....	.....	.....	.....	.....	.....	1,779		1,779		
Grand totals.....	.....	.....	.....	150	3,658	2,067	.....	24	1,779	53	1,779	4,483	

DETAILS OF LONGITUDINAL SEWERS TO DECEMBER 31, 1907 — CONTRACT NO. 2.

LOCATION.	Sub-contractor.	Date begun.	Size.	Lin. feet completed from July 1, to Dec. 31 1907.	TOTAL LIN. FT. COMPLETED TO DECEMBER 31, 1907.				TO BE COMPLETED.		Lin. feet original contract not built, to be abandoned.	OLD SEWER REMOVED.	
					PERMANENT.		BUILT AND ABANDONED.						
					Original contract.	Modified contract.	Removed.	To be removed.	Original contract.	Modified contract.		Lin. feet.	Size.
Broadway — City Hall to Battery place, Manhattan.	Degnon Contracting Co.	Feb. 8, 1904	18″ C. I. pipe..	.....	206	.....	.....	.....	.....	.....	.....	370	4′0″x 3′0 ″brick
			3′0″x 2′0″ brick	.....	30	.....	.....	.....	.....	.....	.....	190	3′8″x 3′4″ brick
			3′0″x 2′4″ conc.	.....	277	.....	.....	.....	.....	.....	.....	235	3′7″x 3′6″ brick
			3′0″x 2′4″ brick and concrete	.....	70	.....	.....	.....	.....	.....	.....	100	3′6″x 2′4″ brick
			3′6″x 2′4″ brick	.....	1,092	.....	.....	.....	.....	.....	.....	250	3′0″x 2′0″ brick
			4′0″ cir. brick..	.....	6	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	.....	.....	.....	.....	1,681							1,145	
Fulton st.— Borough Hall to Flatbush ave., Brooklyn.	Cranford & McNamee.	Dec. 5, 1904	12″ vit. pipe...	464	2,056	624	.....	.....	.....	.....	.....	35	3′6″x 2′8″ brick
			15″ vit. pipe...	.....	196	.....	.....	.....	.....	.....	222	1,068	2′9″x 2′3″ brick
			18″ vit. pipe...	140	338	442	1,396	.....	.....	.....	601	701	15″ vit. pipe
			24″ vit. pipe...	24	24	.....	.....	.....	28	.....	.....	2,532	12″ vit. pipe
			8″ C. I. pipe...	1	.....	177	.....	.....	.....	.....	.....	.....	.....
			12″ C. I. pipe..	19	34	.....	.....	.....	64	.....	.....	.....	.....
			18″ C. I. pipe..	12	827	.....	12	.....	.....	.....	.....	.....	.....
			24″ C. I. pipe..	60	60	.....	.....	.....	2	.....	.....	.....	.....
			3′6″x 2′4″ brick	79	252	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	.....	.....	.....	799	3,787	1,243	1,408		94		823	4,336	
Flatbush ave.— Fulton st. to Atlantic ave., Brooklyn.	Cranford & McNamee.	June 22, 1904	12″ vit. pipe...	136	431	198	437	.....	300	278	.....	1,875	12″ vit. pipe
			15″ vit. pipe...	110	45	110	128	.....	105	27	.....	320	15″ vit. pipe
			18″ vit. pipe...	110	.....	110	316	.....	.....	176	.....	782	18″ vit. pipe
			14″ C. I. pipe..	140	240	65	.....	.....	30	.....	.....	50	4′0″x 3′0″ brick
			18″ C. I. pipe..	.....	.....	.....	12	.....	.....	.....	.....	.....	.....
			4′9″x 3′2″ brick	.....	.....	.....	.....	.....	.....	20	148	.....	.....
Totals.....	.....	.....	.....	496	716	483	893		435	501	148	3,027	
Joralemon st. at Borough Hall.	Cranford & McNamee.	Feb. 8, 1907	12″ vit. pipe...	.....	110	.....	.....	.....	16	.....	.....	.....	.....
Grand totals.....	.....	.....	.....	1,295	6,294	1,726	2,301	.....	545	501	971	8,508	.....

DETAILS OF LATERAL SEWERS TO DECEMBER 31, 1907 — CONTRACT 9–O.

Contract.	CONTRACTOR.	Date begun.	Size.	Lineal feet completed to Dec. 31, 1907.	Lineal feet to be completed.	OLD SEWER REMOVED.	
						Lineal feet.	Size.
9–0–1	Bradley Contracting Co.	Aug. 30, 1907	4′4″ circular	212	523	290	5′0″ circular.
			New invert, 5′3″x 3′8″	94	110	.....	.....
Totals				306	633	290	
9–0–2	Degnon Contracting Co., contractor	.....	15″ vit. pipe	.....	417	128	12″ vit. pipe.
			3′6″x 2′4″	.....	125	2,030	4′0″x 2′8″.
	Jas. Pilkington Construction Co., subcontractor.	June 17, 1907	4′4″ circular	349	111	.....	.....
			4′6″ circular	239	91	.....	.....
			7′0″ circular	896	424	.....	.....
			7′6″x 6′0½″	40	237	.....	.....
			60″ C. I. pipe	.....	140	.....	.....
			New invert, 5′3″x 3′6″	.....	345	.....	.....
			New invert, 5′9″x 3′10″	.....	375	.....	.....
Totals				1,524	2,265	2,158	
9–0–3	Cranford & McNamee, contractors	Dec. 2, 1907	18″ vit. pipe	.....	35	220	4′0″x 2′8″.
	Jas. Pilkington Construction Co., subcontractor.	.....	4′3″x 2′10″	40	165	.....	.....
Totals				40	200	220	
9–0–5	Bradley Contracting Co.	July 22, 1907	3′6″x 2′4″	230	70	300	3′6″x 2′0″.
			4′0″x 2′8″	190	105	296	4′0″x 2′8″.
Totals				420	175	596	
Grand totals				2,290	3,273	3,264	

DETAILS OF LONGITUDINAL SEWERS TO DECEMBER 31, 1907 — CONTRACT 9-0.

Contract.	CONTRACTOR.	Date begun.	Size.	Lineal feet completed to Dec. 31, 1907.	Lineal feet to be completed.	OLD SEWER REMOVED.	
						Lineal feet.	Size.
9-0-1.....	Bradley Contracting Co.....	Nov. 13, 1907	15" vit. pipe.....	31	74	.....	.....
			3'6"x 2'4".....	.....	332	.....	.....
			4'0"x 2'8".....	.....	50	.....	.....
			4'0" circular.....	.....	135	.....	.....
			36" C. I. pipe.....	.....	240	.....	.....
Totals...	.....	.....	.....	31	831		
9-0-2.....	Degnon Contracting Co.....	Not begun....	15" vit. pipe.....	.....	1,596	.....	.....
			18" vit. pipe.....	.....	255	.....	.....
			3'6"x 2'4".....	.....	887	.....	.....
			14" C. I. pipe.....	.....	294	.....	.....
			20" C. I. pipe.....	.....	27	.....	.....
			27"x 18".....	.....	250	.....	.....
Totals...	.....	.....	.....	.....	3,309		
9-0-3.....	Cranford & McNamee.....	Not begun....	15" vit. pipe.....	.....	1,041	.....	.....
			18" vit. pipe.....	.....	270	.....	.....
			3'6"x 2'4".....	.....	650	.....	.....
			6" C. I. pipe.....	.....	100	.....	.....
			14" C. I. pipe.....	.....	100	.....	.....
			20" C. I. pipe.....	.....	286	.....	.....
			Siphon 14" C. I. pipe.....	.....	123	.....	.....
			Siphon 24" C. I. pipe.....	.....	232	.....	.....
Totals...	.....	.....	.....	.....	2,802		
9-0-4.....	Bradley Contracting Co.....	Not begun....	15" vit. pipe.....	.....	174	.....	.....
			4'0"x 2'8".....	.....	501	.....	.....
			20" C. I. pipe.....	.....	68	.....	.....
Totals...	.....	.....	.....	.....	743		
9-0-5.....	Bradley Contracting Co.....	Not begun....	15" vit. pipe.....	.....	448	.....	.....
			18" vit. pipe.....	.....	225	.....	.....
			3'6"x 2'4".....	.....	230	.....	.....
Totals...	.....	.....	.....	.....	903		
Grand totals.	.....	.....	.....	31	8,588		

TABLE OF AVERAGE INSIDE AND OUTSIDE TEMPERATURES AND DIFFERENCES FOR EACH MONTH, 1905, 1906, 1907.

YEAR.	JANUARY.			FEBRUARY.			MARCH.			APRIL.		
	Inside temperature.	Outside temperature.	Differences.	Inside temperature.	Outside temperature.	Differences.	Inside temperature.	Outside temperature.	Differences.	Inside temperature.	Outside temperature.	Differences.
1905	54.2	27.5	26.7	52.0	24.6	27.4	57.5	40.0	17.5	65.5	49.8	15.7
1906	61.5	37.3	24.2	59.5	31.2	28.3	59.0	34.9	24.1	66.0	51.7	14.3
1907	49.7	32.2	17.5	47.7	24.4	23.3	52.5	40.8	11.7	59.0	45.0	14.0

TABLE OF AVERAGE INSIDE AND OUTSIDE TEMPERATURES, ETC.—(*Continued*).

YEAR.	MAY.			JUNE.			JULY.			AUGUST.		
	Inside temperature.	Outside temperature.	Differences.	Inside temperature.	Outside temperature.	Differences.	Inside temperature.	Outside temperature.	Differences.	Inside temperature.	Outside temperature.	Differences.
1905	71.2	60.5	10.7	77.5	68.8	8.7	83.0	75.4	7.6	82.5	72.2	10.3
1906	73.0	61.8	11.2	80.5	71.5	9.0	83.0	74.8	8.2	84.0	75.3	8.7
1907	60.0	55.3	4.7	72.0	66.2	5.8	82.5	74.8	7.7	81.5	72.0	9.5

TABLE OF AVERAGE INSIDE AND OUTSIDE TEMPERATURES, ETC.—(*Concluded*).

YEAR.	SEPTEMBER.			OCTOBER.			NOVEMBER.			DECEMBER.		
	Inside temperature.	Outside temperature.	Differences.	Inside temperature.	Outside temperature.	Differences.	Inside temperature.	Outside temperature.	Differences.	Inside temperature.	Outside temperature.	Differences.
1905	80.5	66.8	13.7	76.5	56.9	17.6	68.5	43.8	24.7	65.0	37.7	27.3
1906	83.5	70.2	13.3	75.5	56.1	19.4	67.0	44.9	22.1	57.5	32.7	24.8
1907	77.7	67.8	9.9	69.5	52.5	17.0	61.5	45.2	16.3	53.0	37.8	15.2

WORK OF INSPECTION DEPARTMENT.

The operations of the Inspection Department since July 1 1907, consisted principally in clearing off all arrears of standard material, wrought and cast, yet undelivered for contract No. 2, Brooklyn-Manhattan Railroad; and some material yet required for the West Side Viaduct to Van Cortlandt Park, now nearing completion. Contracts for the Brooklyn Loop Lines have recently been placed, and material rolled and inspected.

There has been an increased use of cement on contract No. 2, as well as much special work in the laboratories in investigating waterproofing material in view of its future use in the construction of the various sections of the Brooklyn Loop Lines.

The total weight of steel accepted at the mills since subway construction was commenced, amounts to:

For contract No. 1	168,400,327	pounds
For contract No. 2	26,525,710	"
Brooklyn Loop Lines	3,184,825	"
Weight accepted since July 1, 1907, up to and including December 31:		
For Contract No. 1	284,767	"
For Contract No. 2	299,541	"
Brooklyn Loop Lines	3,184,825	"

The total weight of finished material shipped from the shops since commencing work amounts, at this date, to 166,524,385 pounds for contract No. 1, divided as follows:

Subway proper, Line work	63,972,335	pounds
Subway proper, Stations	31,915,089	"
Subway proper, Manholes	701,349	"
Subway proper, Curve Betterments	410,077	"
Manhattan Viaduct	5,302,595	"
West Side Viaduct, proper	12,886,469	"
West Side Viaduct, Stations	968,187	"
West Side Viaduct, Harlem Ship Canal Bridge	3,720,082	"
West Side Viaduct, Van Cortlandt Park Extension	11,052,872	"
West Side Viaduct, Van Cortlandt Park Extension, Stations	815,624	"
East Side Viaduct, proper	29,669,240	"
East Side Viaduct, Stations	1,894,262	"
Yards, 178th Street and Boston Road	3,216,204	"
Total	166,524,385	pounds

The total weight of finished material shipped from the shops since commencing work, amounts, at this date, to 26,597,648 pounds for contract No. 2, divided as follows:

Subway proper, Line work	12,973,909	pounds
Subway proper, Station	11,691,394	"
East River Tunnel	1,784,644	"
Air Shaft at Battery Park	139,312	"
Manholes	8,389	"
Total	26,597,648	pounds

The total weight of finished material for the Brooklyn Loop Lines shipped from the shops since commencing work amounts, at this date, to 880,975 pounds.

The weight shipped since July 1, 1907, was for

Contract No. 1	1,056,377	pounds
Contract No. 2	361,958	"
Brooklyn Loop Lines	880,975	"

A comparison between actual shipped weights and estimated weights of material on all drawings on which work has been completed to date shows:

	Contract No. 1.	Contract No. 2.
	Pounds.	*Pounds.*
Shipped weight of	166,524,385	26,597,648
Estimated weight of	165,470,475	26,340,127

These totals thus indicate an average excess in weight of only .64 of one per cent. for contract No. 1, and .98 of one per cent. for contract No. 2, the allowed specification variation being 2.5 per cent. deficiency.

Since July 1, 1907, cast-iron material furnished consisted principally of material for the East River tunnel, with columns for Nevins street station, Flatbush and Atlantic avenue station, and some cast-iron fenders and manhole frames and covers, contract No. 2.

The total weight of cast-iron, exclusive of a small amount of drawbridge material, shipped since the commencement of operations, amounts to 19,731,246 pounds for contract No. 1, divided as follows:

Pipe (water and sewer)	10,221,237	pounds
Station columns, elevated fenders, manholes, etc	5,162,290	"
Harlem River tube segments	4,347,719	"
Total	19,731,246	pounds

The total weight of cast-iron for contract No. 2 shipped since commencement of operations amounts to 66,691,970 pounds, divided as follows:

Pipe (water and sewer)	1,376,664	pounds
Station columns, manholes, etc	1,260,735	"
East River tube segments	64,054,571	"
Total	66,691,970	pounds

The weight shipped since July 1, 1907, to date, was 4,598 pounds for contract No. 1 and 392,604 pounds for contract No. 2.

The total amount of cement shipped since the commencement of construction amounts to 1,317,942 barrels. The quantity delivered on the work during the six months, July 1 to December 31, 1907, was 73,089 barrels, divided as follows:

Contract No. 1.	Contract No. 2.	Brooklyn loop lines.
12,085 barrels.	56,689½ barrels.	4,314½ barrels.

The total amount of Portland cement accepted during the six months of 1907 ending December 31, was 93,260 barrels, all American Giant.

The average results from complete tests of 11 accepted lots of Portland cement, of 4,781 barrels each, show:

FOR NEAT BRIQUETTES.	One day.	Seven days.	Twenty-eight days.
	Pounds.	*Pounds.*	*Pounds.*
American Giant, average results	354	667	770
Specification requirements	150	400	500

FOR SAND BRIQUETTES 2 TO 1.	Seven days.	Twenty-eight days.
	Pounds.	*Pounds.*
American Giant, average results	360	518
Specification requirements	200	300

Results obtained are shown below covering percentage of gain, both neat and in sand mortars, as well as average results of boiling tests on all accepted cement during same six months' period:

BRAND OF CEMENT.	PER CENT. INCREASE 7 TO 28 DAYS.		Average strength of boiled briquettes.
	Neat.	Sand 2 to 1.	
			Pounds.
American Giant	16.3	44.4	672

During this six months' period there have been broken of neat Portland cement, 3,528 briquettes; of 2 to 1 mortar briquettes, 7,537 were broken. Total number of all briquettes, neat and mortar, 11,065; of these briquettes only 13 failed, 1 neat and 12 mortar.

Average results of all accepted cement during year periods follow:

NEAT.

	One day.	Seven days.	Twenty-eight days.
	Pounds.	*Pounds.*	*Pounds.*
1900	229	582	714
1901	300	645	763
1902	317	703	800
1903	309	745	854
1904	294	700	786
1905	284	678	773
1906	313	709	801
1907	331	670	779

SAND 2 TO 1.

	Seven days.	Twenty-eight days.
	Pounds.	*Pounds.*
1900	276	434
1901	380	525
1902	419	545
1903	423	529
1904	408	509
1905	411	528
1906	389	508
1907	347	504

The following tables show average strength of all accepted Portland cement at different periods up to 5 years, aggregating 1,388,448 barrels:

NEAT.

	One day.	Seven days.	Twenty-eight days.	Three months.	Six months.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Average results to December 31, 1907	299	684	794	799	801

	One year.	Two years.	Three years.	Four years.	Five years.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Average results to December 31, 1907	803	787	767	779	750

SAND 2 TO 1.

	Seven days.	Twenty-eight days.	Three months.	Six months.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
Average results to December 31, 1907	402	525	568	546

	One year.	Two years.	Three years.	Four years.	Five years.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Average results to December 31, 1907	528	486	451	485	461

Average gain at 28 days 30.6 per cent.

The work covered by the chemical laboratory of the Department was:

Number of steel analyses, finished material, Contract No. 2 and Brooklyn Loop Lines	538
Number of cast-iron analyses	112
Number of paint samples analyzed	3
Number of asphalt samples analyzed	10
Number of cement samples analyzed	46
Number of gypsum samples analyzed	9
Number of clinker samples analyzed	2

Number of oil samples analyzed	1
Number of composition samples analyzed	3
Number of experimental tests on asphalt	27
Number of experimental tests on waterproofing felts	10
Number of experimental tests on cement	15
Total	776

EQUIPMENT.

The equipment of substation No. 21 for operation of the Brooklyn extension to Borough Hall station is completed. The equipment comprises three 1500 k.w. converters with their complement of transformers and switchboard accessories. This substation is ready to begin operation as soon as the cable installation between the power house at Fifty-ninth street and the substation is completed.

The installation of contact rail is complete to Hoyt street station, Brooklyn.

Telephone cables have been installed as far as Borough Hall station, Brooklyn, and work is progressing favorably on the installation of about sixty line telephones for emergency use, one being located in each manhole throughout the Brooklyn tube tunnels, and six in the sump chambers.

Installation of the fire-alarm system is also progressing favorably.

The supply cables for power for the ventilation apparatus and power for the air compressors used for drainage are installed. The apparatus for tunnel ventilation is on hand, and will be put in place as soon as the chambers for receiving them are in proper condition. Two of the compresses to supply air for the drainage system are on hand, and the others are approaching completion.

The Hoyt street station is nearly completed, and the Borough Hall station is ready for the lighting current, which will be turned on as soon as the cable connection is completed through the Brooklyn shaft.

PASSENGER TRAFFIC.

During the eleven months ending November 30, 1907, the ticket sales show that 164,791,251 passengers were transported in the subway, as shown by table annexed. This was 23 per cent. greater than for the corresponding eleven months of 1906.

The variation in the ticket sales by months is shown on chart B, appended. During the eleven months the smallest number of passengers was carried in the month of July. The largest number was carried in October, and 14,981,023 was the average for the eleven months.

The following tables show the distribution of passengers and the days of minimum and maximum traffic during the eleven months of 1906 and 1907:

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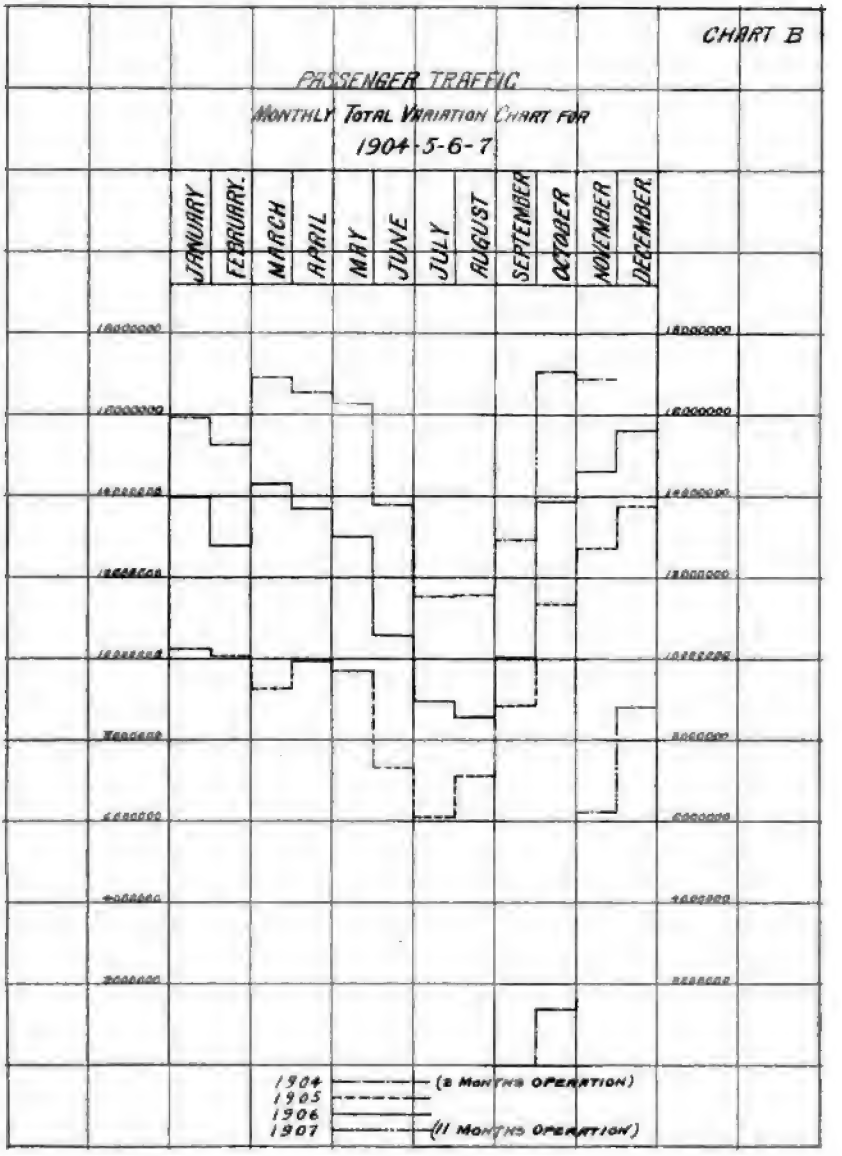
CHART B

PASSENGER TRAFFIC

MONTHLY TOTAL VARIATION CHART FOR 1904-5-6-7



Distribution of Passengers Over the Different Portions of the Railroad for the First Eleven Months of 1906 *and* 1907.

LOCATION.	JAN. 1 TO DEC. 1, 1906.		JAN. 1 TO DEC. 1, 1907.	
	Number of passengers.	Per cent.	Number of passengers.	Per cent.
From South Ferry to Fulton st., inclusive	12,911,988	9.7	15,299,282	9.3
From City Hall to 96th street, inclusive	83,157,884	61.9	100,051,668	60.7
From 110th street, Lenox avenue, to 180th street	26,554,630	19.8	31,890,362	19.4
From 103d street, Broadway, to 230th street	11,544,352	8.6	17,549,939	10.6
Total	134,168,854	100.	164,791,251	100.

DAYS OF MINIMUM AND MAXIMUM TRAFFIC.

	ELEVEN MONTHS FROM JAN. 1, 1906, TO NOV. 30, 1906.		ELEVEN MONTHS FROM JAN. 1, 1907, TO NOV. 30, 1907.	
	Date.	Passengers carried.	Date.	Passengers carried.
Minimum week day	July 4	168,756	July 4	277,561
Maximum week day	Nov. 26	569,643	Nov. 11	665,733
Minimum Sunday	July 29	159,146	June 2	224,438
Maximum Sunday	Nov. 25	324,037	May 12	399,551

The above tables have been compiled to include eleven months only, as the requisite figures for December, 1907, not being obtainable at the date of this report, necessarily have been omitted.

From July 22 to July 29 the engineering department made extensive observations on the movement of elevated trains over the Brooklyn bridge. The condition of traffic was noted throughout the twenty-four hours. Similar observations were made upon all of the elevated and subway lines in Manhattan from August 21 to August 23. As a result of these investigations orders to the operating company were issued to increase their service.

BROOKLYN LOOP LINES.

Contracts have been let for the Manhattan sections of the Brooklyn Loop Lines, known as route 9; the contract for the section officially designated as 9-0-2 having been executed on April 27; that for section 9-0-3 on May 27, and for sections 9-0-1, 9-0-4 and 9-0-5, contracts were executed on June 27, 1907. These sections are more specifically described as follows:

Section 9-0-1. Situated between a line crossing Centre street about forty feet north of Pearl street and the southeasterly side of Park Row.

Section 9-0-2. In Centre street between Pearl street and Canal street, and in Walker street and Canal street between Centre street and Chrystie street.

Section 9-0-3. In Centre street between Canal street and Broome street.

Section 9-0-4. Begins at the northerly side of Broome street and curves through Cleveland place (formerly Marion street) and private property into the new Delancey street extension, and runs thence under said extension and under and across the Bowery and under Delancey street to a point about 225 feet east of the centre line of the Bowery.

Section 9-0-5. In Delancey street between the Bowery and Norfolk street.

The lengths of railway covered by these sections are as follows:

SECTION.	Four-track subway.	Two-track subway.	Equivalent, single track.
	Miles.	*Miles.*	*Miles.*
9-0-1	.19	.....	.76
9-0-2	.26	.33	1.70
9-0-3	.25	.....	1.00
9-0-4	.24	.....	.96
9-0-5	.30	.....	1.20
	1.24	.33	5.62

The Degnon Contracting Company, the contractors for section 9-0-2, began work on this section on May 27, 1907. The Cranford Company, contractors for section 9-0-3, began work on July 1, 1907. The Bradley Contracting Company, contractors for sections 9-0-1, 9-0-4 and 9-0-5, began work on September 3, 1907, for section 9-0-1, on August 17 for section 9-0-4, and on July 8 for section 9-0-5.

The construction work to date on these contracts has consisted mainly of excavating. Some work has been done in the matter of underpinning buildings by the Degnon Contracting Company on Canal street, and by the Cranford Company on Centre street between Grand and Broome streets.

Sewer construction was also begun on several sections of this subway loop line, as described in the work done by the sewer division given elsewhere in this report.

These contracts include the construction of pipe galleries in addition to work of constructing the railroad.

The following represents the principal work done to December 31, 1907:

Brooklyn Loop Lines.	Earth Excavation.
Contract 9-0-1	29,200 cubic yards
" 9-0-2	31,100 " "
" 9-0-3	17,100 " "
" 9-0-4	20,900 " "
" 9-0-5	54,200 " "
Total	152,500 cubic yards

Pipe Galleries.	Earth Excavation.
Contract 9-0-5	1,700 cubic yards

The above represent quantities within the "neat" lines of excavation.

FOURTH AVENUE, FORT HAMILTON AND CONEY ISLAND ROUTE.

On Tuesday, July 30, 1907, a public hearing was held on plans and form of contract for five sections of the proposed Fourth avenue, Fort Hamilton and Coney Island route in Brooklyn, as follows:

1. That portion of the proposed Manhattan Bridge connection lying in Flatbush avenue extension, between Nassau and Willoughby streets, in the borough of Brooklyn.

2. That portion of the proposed Manhattan Bridge connection lying in Flatbush avenue extension and Fulton street, from Willoughby street to Ashland place, in the borough of Brooklyn.

3. That portion of the proposed Fourth avenue route, Fourth avenue, from Sackett street to Tenth street, in the borough of Brooklyn.

4. That portion of the proposed Fourth avenue route lying in Fourth avenue, from Tenth street to Twenty-seventh street, in the borough of Brooklyn.

5. That portion of the proposed Fourth avenue route lying in Fourth avenue, from Twenty-seventh street to Forty-first street, in the borough of Brooklyn.

Contracts and plans for the above sections were practically ready to be printed when your present Chief Engineer received his appointment, and in view of the fact that he would later have charge of the construction he was asked to pass upon these contracts and plans.

An examination of the plans showed the use of grades as high as 5 per cent., and of a headroom of 13 feet 6 inches above top of rail. Since 5 per cent. grades necessitate great care and extra expense in operation, and as ultimately it is probable that subways of different boroughs will cross the river through tunnels where the grades may be limited to 3 per cent., it seemed expedient to limit the grades to 3 per cent. on all new work. Inquiry as to the height of rolling stock of local suburban service showed that cars of a height, including ventilator, of 14 feet 4 inches above top of rail are being used. It was, therefore, deemed advisable to adopt 14 feet 6 inches from top of rail as the minimum clearance for this subway, and thus increase its usefulness to any of several railway corporations which might desire to operate it, and thereby facilitate the making of more advantageous arrangements by the city for the subsequent rental and operation of the road. An examination of the cost of the modifications proposed showed that the change of grade, from 5 per cent. to 3 per cent., could be made without any material increase in cost of construction; and although in one restricted locality it necessitated the acquirement of additional property, such a condition is exceptional and would rarely be encountered in future work. An estimate of the extra cost due to increased headroom indicated that the change could be made for considerably less than 5 per cent. over the plans originally made. Under these circumstances it was deemed advisable to submit these changes for your consideration. They subsequently received your approval.

Amended plans and specifications were prepared to conform to the changes adopted, and to include the section, previously omitted, extending from a point near the crossing of Fulton street and Ashland place, through Ashland place and Fourth avenue to Sackett street. These plans and specifications will be ready to be advertised for bids about February 15, 1908.

SURVEYS.

Other than the surveys essential for construction of the Brooklyn Loop Lines, and the sewers in connection therewith, the field surveys were continued along the line of the New York Central and Hudson River Railroad on Eleventh avenue and the Hudson River water front, for the purpose of preparing necessary maps and plans for the institution of condemnation proceedings, which maps and plans are now ready.

These surveys extend from North Moore and Hudson streets continuously along Hudson, Canal and West streets, Tenth and Eleventh avenues to Sixty-second street. North of Sixty-second street surveys of the tracks were made at Seventy-second, Seventy-ninth, Ninety-sixth, One Hundred and Twenty-ninth, One Hundred and Forty-fifth, One Hundred and Fifty-first to One Hundred and Fifty-fifth, One Hundred and Fifty-eighth and One Hundred and Sixty-fifth streets, Depot Lane and Dyckman street.

In view of changes contemplated to provide additional tracks between Ninety-sixty street and One Hundred and Third street, a detailed survey of Broadway between these points is now under way.

During July and August, further surveys were made of the base line and profile of Fourth avenue in Brooklyn, from Flatbush avenue to Forty-first street.

TEST BORINGS.

The only test borings made during the period from July 1 to December 31, 1907, were five borings near the southeast corner of Centre and Walker streets, to determine the depth to rock in this vicinity. Rock was found in each instance. Three tests were made on the east side of Centre street south of Walker street, and two tests on the south side of Walker street, east of Centre street. The southernmost test on Centre street was about midway between Walker and White streets, where rock was found at 89.57 feet below mean high water and 101.15 feet below the street surface. The easternmost boring on Walker street near Baxter street encountered rock at 74.05 feet below mean high water and 93.5 feet below the street surface.

PENNSYLVANIA TUNNEL & TERMINAL RAILROAD COMPANY.

The following information as to the status of the work on the railroad of the Pennsylvania Tunnel & Terminal Railroad Company on December 31, 1907, has been kindly furnished by Mr. Samuel Rea, Vice-President, and is of such interest that it has been deemed well to give the data in full.

Beginning at a point on the railroad of this company on the west bank of the North river, the two tunnels extending to and under that river to the west side of Eleventh avenue, borough of Manhattan, have been fully excavated and iron-lined, and some concrete lining has been laid therein. These tunnels are each 6,116 feet in length. From Eleventh avenue eastward to the terminal station site at the east side of Tenth avenue, the tunnels are of different size sections, so made in order to decrease the spacing from centre to centre of tracks from 37 feet in the river tunnels to the standard spacing in the station; and from the shield chambers for the river tunnels

under Eleventh avenue to the intercepting arch from Manhattan shaft, a distance of 198½ feet, the percentage of work completed is as follows:

	Per Cent.
Excavation	100
Concrete	89
Brickwork	99
Waterproofing	100
Electric Conduits	99

The intercepting arch, 32 feet wide, from Manhattan shaft (adjoining the direct line of the tunnels) to the tunnels is completed as follows:

	Per Cent.
Excavation	92
Concrete	34
Brickwork	32
Waterproofing	50
Electric Conduits	8

From the intercepting arch to the east side of Tenth avenue, the tunnels are completed as follows:

	Per Cent.
Excavation	97
Concrete	65
Brickwork	54
Waterproofing	69
Electric Conduits	58

From Tenth avenue to Ninth avenue the work completed is as follows:

	Per Cent.
Excavation	58
Concrete	7

Work in and Under Ninth Avenue.

Fourteen of the elevated railway columns are on permanent timber bents, and 12 are on temporary supports. The total number to be underpinned is 18. The easterly portion of the concrete north abutment has been completed, and the work completed is as follows:

	Per Cent.
Excavation	53
Concrete	23
Steel work	88

On the terminal station site between Ninth avenue and the west side of Seventh avenue, some excavation remains to be done in the northwest and southwest corners of the lot between Eighth and Ninth avenues; and the lot between Seventh and Eighth avenues is down to subgrade.

The percentage of work done in the whole area is as follows:

	Per Cent.
Excavation	97
Concrete	99
Miscellaneous work	90

In that portion of the station site immediately east of the west side of Seventh avenue, extending to the normal section of the 32nd and 33d street tunnels, the work completed is as follows:

	Per Cent.
Excavation	79
Masonry — Concrete and Brick	33
Steel Bridging Erection	50

All column foundations are complete in this section, except under Seventh avenue, where a rock core still remains to be excavated.

The progress on viaducts in the vicinity of the station is as follows:

	Per Cent.
Masonry	46
Steel erection	50
Restoration of street surface	22
Approximate percentage of whole work completed	72

31st Street Viaduct Between 7th and 8th Avenues.

Temporary pavement of roadway is completed. Reinforced concrete floor work of lower decks, sidewalk and curb of passageway, and brick partition walls have been completed. Erection of steel work is the principal work remaining to be done.

31st Street Viaduct Between 8th and 9th Avenues.

Twenty-nine column foundations are required, of which eight have been completed, except for the setting of cap stones. Excavation is under way for four additional foundations.

33rd Street Viaduct Between 7th and 8th Avenues.

All steel work, including lower decks, has been erected, except the extreme easterly panel. The roadway deck masonry has been completed.

33rd Street Viaduct Between 8th and 9th Avenues.

Twenty column foundations are required; excavation has been completed for two, and partially completed for eleven.

Eighth Avenue Viaduct.

All construction work has been completed, except painting, drain connections, and dressing upper floor plates. Temporary sidewalk and fence on the west side have been built for about three-fourths of their length, and the completed sidewalk is being used by the public.

Ninth Avenue Viaduct.

Foundations for ten columns have been completed, and excavation is under way for foundations of five more.

The miscellaneous work required within the terminal area for station

building foundations, pump sumps, drainage system, piping and trucking subways, conduit system, and pits for baggage lifts is completed as follows:

	Per Cent.
Building foundations	97
Excavation	75
Backfilling	66
Drainage system	50
Conduit system	67
Piping and trucking subways	65
Approximate percentage of whole work now completed	70

Some steel work has been erected for the southeast corner of the terminal station building.

Tunnels Under 33rd Street.

In the three-track tunnel extending from a point 398 feet west to a point 180 feet west of the west line of Sixth avenue, a distance of 218 feet, the work completed cannot easily be shown by percentage, but both the heading and bench have been taken out for the full length of the section, and about 83 linear feet of full sized excavation has been completed.

In the twin tunnels extending from a point 180 feet west of Sixth avenue to a point 231 feet west of First avenue, a distance of 4,484 feet, the work completed is as follows:

	Per Cent.
Heading	100
Full sized excavation	75
Concrete floor	66
Bench walls	54
Arch	42
Waterproofing	56
Electric conduits	50
Core walls	54

In the two separate tunnels, with rock dividing wall, extending from a point 231 feet west of First avenue to a point 12 feet east of same, a distance of 343 feet, the work completed is as follows:

	Per Cent.
Full sized excavation	100
Concrete floor	72
Bench walls	72
Arch	69
Waterproofing	73
Electric conduits	71

32d Street Tunnels.

In the three-track tunnel extending from a point 608 feet west of the west line of Sixth avenue to a point 25 feet west of the east line of Sixth avenue, a distance of 683 feet, the work completed cannot easily be shown by percentage, but full sized excavation has been advanced a distance of 388 feet.

In the twin tunnels extending from a point 25 feet west of the east line of Sixth avenue to a point 200 feet west of the west line of First avenue, a distance of 4,260 feet, the work completed is as follows:

	Per Cent.
Heading	100
Full sized excavation	63
Concrete floor	55
Bench walls	53
Core walls	54
Arch	42
Waterproofing	56
Electric conduits	50

In the two separate tunnels, with rock dividing wall, extending from a point 200 feet west of the west line of First avenue to a point 75 feet east of the east line of First avenue, a total distance of 375 feet, the work completed is as follows:

	Per Cent.
Full sized excavation	100
Concrete floor	72
Bench walls	72
Arch	69
Waterproofing	73
Electric conduits	71

Manhattan Shafts.

These shafts are practically completed, the work remaining to be done consisting of the placing of concrete on the bottom, which will not be commenced until the river tunnels are completed.

East River Tunnels.

These tunnels, four in number, extend from the Manhattan shafts east of First avenue, New York, to the Long Island City shafts, about 60 feet west of Front street in Long Island City. The average distance between these shafts is 3,911.2 feet, and the distance yet to be excavated between the shields on each line, Line "A" being the most northerly, is as follows:

	Feet.
Line "A"	925
Line "B"	600
Line "C"	800
Line "D"	600

Long Island City Shafts.

Sixty feet west of Front street in Long Island City. These shafts are practically completed. Some additional work remains to be done after the river tunnels are finished.

Long Island City Tunnels.

From Long Island City shafts eastward to East avenue shaft a distance of 1,950 feet, the work completed is as follows:

In line "A" metal tunnel lining has been finished, except for a distance of 59 feet; and masonry lining has been completed for a distance of 1,324 feet.

In line "B" metal tunnel lining has been completed, and masonry lining has been completed for a distance of 1,352 feet.

In line "C" metal tunnel lining has been completed, also masonry lining, except for a few rings just east of Long Island City shaft.

In line "D" both metal tunnel lining and masonry lining have been completed.

Tunnels Eastward from East Avenue Shaft to a Point BE *Feet East of East Avenue, a Total Distance of* 120 *Feet.*

The work in this section is completed.

Cut and Cover Tunnels and Approaches.

From a point 25 feet east of East avenue to a line 10 feet west of the west side of Thomson avenue, an average distance of 3,700 feet: This work comprises the easterly ends of the tunnels, line "A" being in tunnel for 1,809 feet, line "B" being in tunnel for 2,000 feet, line "C" being in tunnel for 1,073 feet, line "D" being in tunnel for 2,020 feet. It also includes approaches, additional tracks east of the portals, and foundations for crossings under some of the Long Island Railroad tracks.

A section of line "A," about 150 feet long, has been completed; and the percentage completed is as follows:

	Per Cent.
Excavation	13.
Pile foundations	24.
Concrete	1.5

Sunnyside Yard.

Extending from a line ten feet west of the west side of Thomson avenue to the west side of Woodside avenue, a distance of 8,420 feet.

The percentage of work completed is as follows:

Embankment, 21 per cent.

For the Thomson avenue bridge, about 25 per cent. of the masonry has been laid.

For the No. 5 track bridge, foundation excavation is completed; no concrete has been laid.

For the No. 2 track bridge, foundation excavation has been completed.

For the Laurel Hill avenue bridge, foundation excavation has been commenced.

For the Thomson avenue embankment, 44 per cent. has been completed.

For the Meadows street embankment, 31 per cent. has been completed.

For the Hunter's Point avenue embankment, on the south side, 25 per cent. has been completed.

HUDSON & MANHATTAN COMPANY'S TUNNELS.

(From information furnished by Mr. Wm. McAdoo, President.)

New York and Jersey Railroad Division.

During the six months ending December 31, 1907, the tunnels under the river, including track laying and installation of block signals, were completed, and are practically ready for the operation of trains.

The west bound tunnel of the New York approach, from the river to Sixth avenue and Christopher street, is completed; the electric conduit construction is being installed, and the ballasting, track laying and signals under way. The electrical sub-station on private property at Greenwich and Christopher streets is practically completed, as is also the underground station at Christopher and Greenwich streets, with stairways through private property connecting with the street surface. The underground station at Christopher street and Sixth avenue is practically completed, with the exception of the stairway and passages connecting with the street surface. The junction enlargement at the intersection of Sixth avenue and Ninth street is being constructed by underground methods, under air pressure, and will be completed probably early in 1908, with the exception of the overlying ducts and passages, which will be constructed later by proper methods.

Work on the Sixth avenue extension, from Christopher to Twelfth streets has been completed. This subway, including the laying of ducts, track, block signals and stations between Twelfth and Twenty-seventh streets is practically completed, and will also be ready for operation early in January, 1908. The temporary supports for the elevated railroad structure and the surface car lines on Sixth avenue are being maintained between Twenty-second and Twenty-eighth streets, and nearly all of the buildings on the site of the Thirty-third street terminal have been removed.

Work on the Ninth street branch, east of Sixth avenue, has been started from the new shaft on private property at the intersection of Ninth street and Sixth avenue.

Hudson and Manhattan Railroad Division.

Work has been actively carried on from the Jersey City end, on both the east bound and west bound tunnels. Since the first of July, the east bound tunnel from Jersey City to Cortlandt street has progressed 700 feet, and the west bound tunnel from Jersey City to Fulton street has progressed 300 feet. These headings are in solid rock. Shields have been installed in Fulton and Cortlandt streets for the prosecution of the tunnel work westward from the New York end. In Fulton street the tunnel has been extended towards the river for a distance of 600 feet, and in Cortlandt street for a distance of 50 feet.

Work on the approaches to Church street terminal, under Cortlandt and Fulton streets, has been actively prosecuted; the adjacent buildings have been underpinned and the construction of the structure itself, forming enlargements of the terminal station under these streets, has been rapidly prosecuted by the sinking of caissons, each of which comprises a section of the station. Seven caissons have been sunk in Cortlandt street, and eleven in Fulton street.

Work on the buildings overlying the Church street terminal has been actively prosecuted, and it is expected that they will be under roof before the first of the year. The excavation of the basement inside the caisson dam has been practically completed. A shield is being installed for the construction of the foot-passage, extending under Dey street, from the terminal buildings to the rapid transit subway station at Broadway.

ENGINEERING STAFF.

The appointment of your chief engineer took effect on December 1, 1907, but this report being for a period of six months covers the work of the preceding five months conducted by the former chief engineer, due credit for which should be given. The short interval from December 1 to date of this report, has been largely taken up in becoming acquainted with new duties preparatory to taking active charge.

Although under the Public Service Commissions Law the Board of Rapid Transit Railroad Commissioners was abolished on July 1, 1907, its entire engineering staff, in the organization of the Public Service Commission for the first district, was taken over by the latter body and placed under the jurisdiction of the State Civil Service Commission instead of under the Municipal Civil Service Commission. Provision was made, with the consent of the Municipal Civil Service Commission that persons holding positions in the competitive class could within one year be transferred to any of the city departments under Municipal Civil Service, and since July 1, a number of employees have taken advantage of such privilege and been transferred, while others have tendered their resignations. Those who have thus quit the service, have been men mostly in the lower engineering grades. At the close of the year 1907 the total engineering staff amounted to 273 as against a total of 335 on July 1, divided as follows:

1 Chief Engineer.
1 Engineer of Subway Construction.
1 Deputy Engineer of Subway Construction.
5 Division Engineers.
3 General Inspectors.
104 Assistant Engineers.
29 Draughtsmen.
32 Rodmen.
24 Axemen.
10 Inspectors of Steel.
44 Inspectors of Masonry.
5 Cement Testers.
1 Steel Chemist.
1 Secretary.
11 Clerks.
1 Photographer.

During the past six months changes occurred in the engineering department executive staff. Mr. George S. Rice, formerly chief engineer, on December 1 was appointed engineer of subway construction, and Mr. Alfred Craven, formerly deputy chief engineer, was appointed on the same date as deputy engineer of subway construction.

All changes and additions to the staff during the past six months are shown in the following table:

NAME.	Title.	Appointment to present rank.	Cessation of service.	Remarks.
Henry B. Seaman	Chief engineer	Dec. 1, 1907		
George S. Rice	Engineer of subway construction	Dec. 1, 1907	.....	Title changed from chief engineer.
Alfred Craven	Deputy engineer of subway construction	Dec. 1, 1907	.....	Title changed from deputy engineer.
Richard B. Post	Assistant engineer	Dec. 1, 1900	July 1, 1907	Resigned.
Bertrand H. Waite	Assistant engineer	Mar. 9, 1903	Oct. 14, 1907	Transferred to Board of Water Supply.
Charles E. Weber	Assistant engineer	Aug. 2, 1904	Sept. 10, 1907	Transferred to Borough of Richmond.
Herbert M. Hale	Assistant engineer	Aug. 23, 1904	Sept. 1, 1907	Resigned.
Dean G. Edwards	Assistant engineer	Aug. 23, 1904	Oct. 14, 1907	Transferred to Board of Water Supply.
James E. Beswick	Assistant engineer	July 16, 1905	Sept. 23, 1907	Transferred to Board of Water Supply.
William T. Fitzpatrick	Assistant engineer	July 17, 1905	Dec. 31, 1907	Transferred to Borough of Brooklyn.
Louis E. Blackman	Assistant engineer	July 19, 1905	July 25, 1907	Resigned.
Louis Koenig	Assistant engineer	July 25, 1905	Sept. 11, 1907	Resigned.
Charles F. Rohde	Assistant engineer	July 28, 1905	Sept. 22, 1907	Resigned.
John F. Perrine	Assistant engineer	June 1, 1906	Oct. 1, 1907	Transferred to Borough of Queens.
Charles J. McGronan	Assistant engineer	Sept. 1, 1906	Sept. 4, 1907	Resigned.
Thomas R. Tetley, Jr.	Assistant engineer	April 4, 1907	Sept. 24, 1907	Resigned.
John H. C. Gregg	Assistant engineer	April 22, 1907	Oct. 14, 1907	Transferred to Board of Water Supply.
Frank G. Doran	Draughtsman	Dec. 12, 1902	Nov. 15, 1907	Transferred to Bridge Department.
Edwin A. Kunze	Draughtsman	June 9, 1904	Aug. 1, 1907	Resigned.
Rudolph G. Pundt	Draughtsman	July 17, 1905	Sept. 1, 1907	Resigned.
Emil F. Zipfel	Draughtsman	Nov. 19, 1906	Sept. 1, 1907	Resigned.
William F. Mercer	Rodman	April 1, 1901	July 1, 1907	Transferred to Board of Water Supply.
John F. Dunn, Jr.	Rodman	April 20, 1903	Aug. 15, 1907	Transferred to Department of Parks.
Albert A. Sommerfeld	Rodman	July 17, 1905	Sept. 7, 1907	Resigned.
William H. Bertram	Rodman	July 17, 1905	Sept. 12, 1907	Resigned.
Joseph A. Leavy	Rodman	Aug. 3, 1905	Dec. 4, 1907	Died.
Samuel S. Cox, Jr.	Rodman	Aug. 3, 1905	July 16, 1907	Transferred to Borough of Brooklyn.
Lewis W. Haggerty	Rodman	Aug. 3, 1905	Aug. 15, 1907	Transferred to Department of Bridges.
John J. J. Callahan	Rodman	Aug. 18, 1905	Aug. 19, 1907	Transferred to Borough of Brooklyn.
Francis L. Molanphy	Rodman	Nov. 1, 1905	Oct. 31, 1907	Resigned.
Joseph A. Donohue	Rodman	Nov. 10, 1905	Oct. 19, 1907	Transferred to Borough of Queens.
Raymond G. Clayton	Rodman	Nov. 16, 1905	Sept. 9, 1907	Resigned.
Thomas F. McNamara	Rodman	April 10, 1906	Sept. 1, 1907	Resigned.
Alfred H. Redding	Rodman	May 1, 1906	Dec. 1, 1907	Transferred to Department of Bridges.
David W. Lellis, Jr.	Rodman	July 2, 1906	Oct. 10, 1907	Resigned.
Walter W. Miller	Rodman (temporary)	Sept. 1, 1906	Sept. 1, 1907	Services terminated.

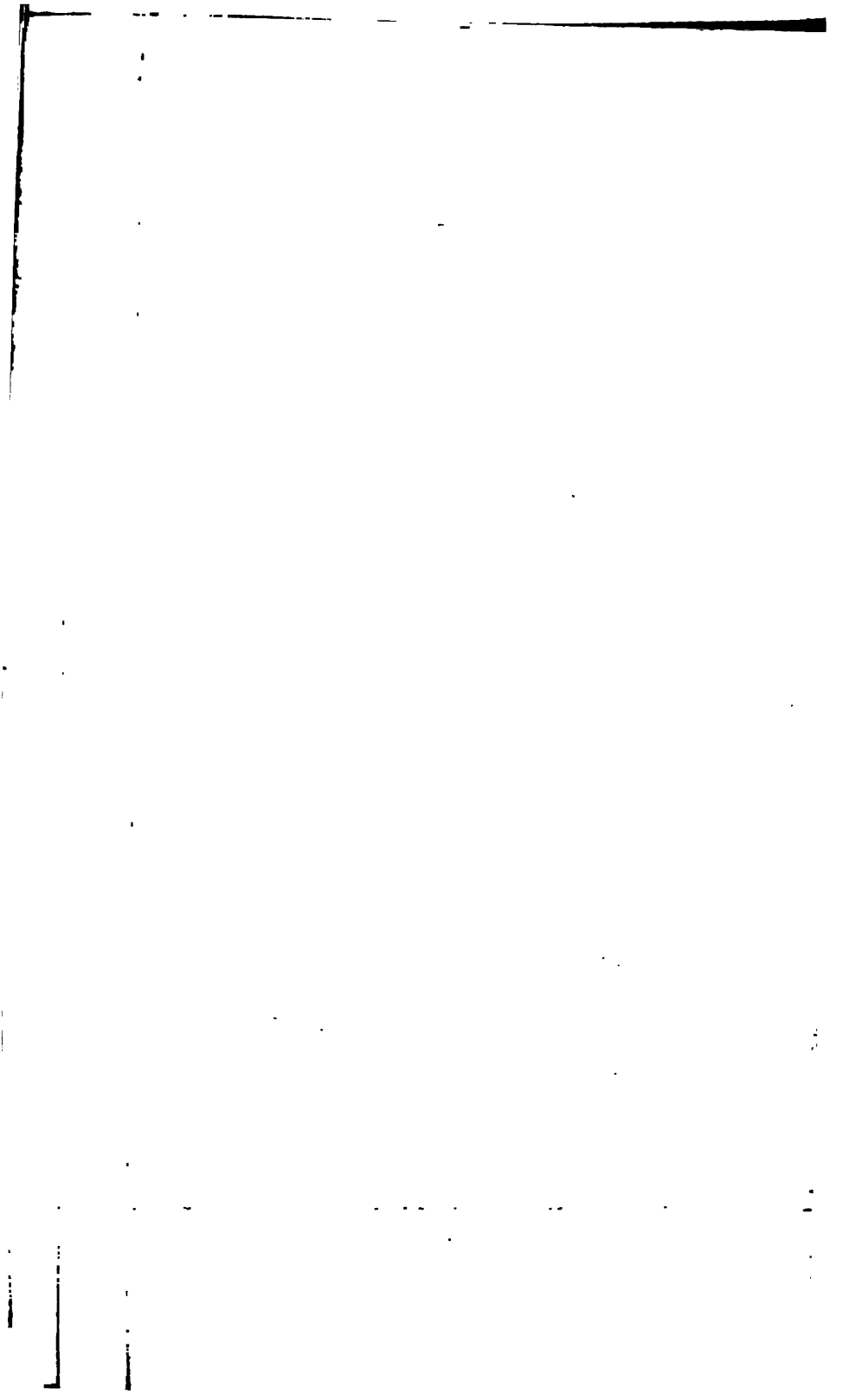
William H. Bressler	Rodman (temporary)	Sept. 4, 1906	Sept. 1, 1907	Services terminated.
David S. Mosesson	Rodman	Nov. 14, 1906	Sept. 6, 1907	Resigned.
Albert F. Kraus	Rodman	Dec. 1, 1906	Sept. 1, 1907	Resigned.
John W. Soule	Rodman	Dec. 10, 1906	Sept. 16, 1907	Resigned.
Charles J. Donohue	Rodman	Jan. 1, 1907	Sept. 18, 1907	Resigned.
Alfred Brady	Rodman	Jan. 9, 1907	Sept. 24, 1907	Resigned.
Charles E. Mellor	Rodman	Jan. 14, 1907	Sept. 11, 1907	Resigned.
Charles M. Madden	Rodman	Mar. 1, 1907	Aug. 15, 1907	Transferred to Board of Water Supply.
Henry S. Craven	Rodman (temporary)	April 18, 1907	July 31, 1907	Services terminated.
George F. Raeburn	Rodman (temporary)	April 18, 1907	July 31, 1907	Services terminated.
Richard T. Wallace	Axeman	April 30, 1906	Sept. 1, 1907	Resigned.
Charles N. Masterson	Axeman	May 11, 1906	Oct. 1, 1907	Resigned.
Charles Schultz	Axeman	Nov. 12, 1906	Sept. 1, 1907	Resigned.
Harry Kantrovitz	Axeman	Nov. 21, 1906	Sept. 1, 1907	Resigned.
Henry P. Labelle	Axeman	Dec. 10, 1906	Sept. 1, 1907	Resigned.
Arthur P. Fogerty	Axeman	Dec. 10, 1906	Oct. 31, 1907	Transferred to Department of Water Supply, Gas and Electricity.
Frank J. McKiernan	Axeman	April 22, 1906	Nov. 11, 1907	Transferred to Borough of Richmond.
Michael Hannigan	Inspector of masonry	Dec. 16, 1905	Sept. 30, 1907	Resigned.
William E. Guilfoyle	Clerk	May 1, 1900	Sept. 4, 1907	Transferred to Secretary's Office.
John F. Lilley	Clerk	Oct. 4, 1901	Sept. 11, 1907	Transferred to Secretary's Office.
William Goldstein	Clerk	June 9, 1902	Dec. 31, 1907	Transferred to Bureau of Transit Inspection.
George V. Bonhag	Stenographer	May 9, 1904	Dec. 1, 1907	Resigned.
Charles B. Magan	Junior clerk	Aug. 7, 1905	Aug. 19, 1907	Transferred to Board of Water Supply.
James C. Rose	Junior clerk	Dec. 1, 1905	Sept. 16, 1907	Resigned.
Edward F. Maher	Office boy	Mar. 26, 1906	July 1, 1907	Resigned.
Edward P. Ward	Office boy	June 20, 1907	Sept. 23, 1907	Resigned.

The engineering executive staff, at the end of the year, comprised the following:

Henry B. Seaman, Chief Engineer.
George S. Rice, Engineer of Subway Construction.
Alfred Craven, Deputy Engineer of Subway Construction.
George Hallett Clark, Engineer First Division.
John H. Myers, Engineer Second Division.
C. V. V. Powers, Engineer Third and Fourth Divisions.
Frederick C. Noble, Engineer Fifth Division.
Amos L. Schaeffer, Engineer Sewer Division.
Sverre Dahm, General Inspector of Designs.
W. A. Aiken, General Inspector of Material.
D. L. Turner, General Inspector of Stations.
M. J. Farrell, Secretary to Chief Engineer.
Pierre P. Pullis, Official Photographer.

Respectfully submitted,

(Signed) HENRY B. SEAMAN,
Chief Engineer.



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APPENDIX C.

STEINWAY TUNNEL.

APPENDIX C.

STEINWAY TUNNEL.

The tunnel extending from Manhattan to Queens along the line of Forty-second street, commonly called the "Steinway Tunnel," has been constructed by a private company, and is not a part of the rapid transit system laid out by the Public Service Commission or its predecessors. No application has been made to the Commission, under any section of the Public Service Commissions Law, by the owners of the tunnel, and no proposition looking toward the granting of a franchise to operate has been presented to the Commission for consideration. But the present situation is so peculiar and so many inquiries have been made at the office of the Commission that a statement of the facts up to December 31, 1907, may be of interest and value to the public.

Origin of the Company. The tunnel was originally begun by the New York and Long Island Railroad Company, which was incorporated July 30, 1887, under chapter 140 of the Laws of 1850, known as the General Railroad Act, and the amendments thereto. The articles of association provided that the company was to continue in existence for ninety-nine (99) years; that the capital stock was to be $100,000, consisting of 1,000 shares at $100 each, and that a railroad was to be constructed and operated about five miles in length extending from a point near Borden avenue, Queens, one mile from the East river, thence under the river and under certain streets and lands in Manhattan to a connection with the New York Central and Hudson River railroad at or near the intersection of Ninth avenue and Thirtieth street, New York city, with a branch northerly to connect with the New York Central and Hudson River railroad near the Grand Central depot, and a branch southerly to connect with the Hudson river tunnel in the vicinity of Washington square.

The General Railroad Act of 1850 was amended by chapter 775 of the Laws of 1867, which provided, among other things, that if any corporation, organized under the Act of 1850,

> "shall not, within five years after its articles of association are filed and recorded in the office of the Secretary of State, begin the construction of its road, and expend thereon ten per cent. on the amount of its capital, or *shall not finish its road and put it in operation* in ten years from the time of filing its articles of association, as aforesaid, *its corporate existence and powers shall cease.*"

Work not Completed. It, therefore, became incumbent upon the N. Y. & L. I. R. R. Co. to have begun construction of the tunnel and to have expended thereon $10,000 by July 30, 1892, and to have finished it and put it in operation by July 30, 1897, under penalty of forfeiture of its corporate existence and powers.

The company's contractor started work in May, 1892, and it is claimed that up to July 30 of that year the sum of $11,718.33 had been expended. Work continued down to December, 1892, when an explosion occurred, and for nearly thirteen years nothing further was accomplished. In resuming operations in 1905, eight years after the charter would have expired under the law of 1867, above quoted, the company relied upon a series of acts, the last of which, adopted in 1903, is claimed to have extended until January 1, 1907, the time within which the road should have been finished and put in operation. As a matter of fact the tunnel was not finished and put in operation by this date.

Franchise Grants. Incorporation did not of itself confer upon the company the right to begin work. Consents had still to be obtained from the local authorities and from the State of New York, which are as follows:

(1) Resolution of the Board of Aldermen of the old city of New York, approved December 31, 1890.
(2) Patent issued by the State of New York, January 5, 1891.
(3) Resolution of the Board of Aldermen of Long Island City, approved October 27, 1891.

By the first resolution the city assented

> "to the construction of a double track railroad by the New York and Long Island Railroad Company, in, by and through a tunnel *beneath the surface of 42d street, from its easterly end, to a point therein between Tenth and Eleventh avenues*, in said city, with such connections, branches, turnouts, sidings and switches, as may be requisite and necessary, in accordance with the plans and profiles of such railroad heretofore deposited with this board, or such modification thereof as shall be approved by the Commissioner of Public Works of said city."

For compensation to the city of New York, the ordinance provided that the company should

> "pay annually to the city of New York *three per centum of its gross earnings or receipts from transportation of persons and property on its railroad within said city;* such payment to be exclusive of all taxes levied by and payable to the city of New York on the real or personal property, capital stock or income of said company, and the books of said company showing the amount of its said gross earnings or receipts shall, at all reasonable times and hours, be open to the inspection of the Comptroller of the city of New York (or to his duly authorized agents) for the purpose of verifying the returns thereof of said company."

The consent of the State of New York was granted by the following patent:

> The People of the State of New York, by the Grace of God, Free and Independent: To All to whom these Presents shall come, Greeting:
>
> Know Ye, That pursuant to Chapter 140, Laws of 1850, as amended by Chapter 601, Laws of 1886, and a resolution of the Commissioners of the Land Office adopted November 25, 1890, we have given and granted, and by these Presents do *give and grant* unto The New York and Long Island Railroad Company, its successors and assigns, *a right of way ninety-nine feet in width and fifty feet in height within which to con-*

struct a tunnel for the use and operation of the above-named grantee's railroad beneath the waters of the East River upon and along the route of said railroad between the City of New York and Hunter's Point in Long Island City, as shown in plan and profile, upon the charts filed in the office of our Secretary of State, with the water grant papers of the month of January, 1891.

Together with all and singular the rights, hereditaments and appurtenances to the same belonging, or in any wise appertaining; *to have and to hold the above described premises unto* the said The New York and Long Island Railroad Company, its successors and assigns *forever.*

Long Island City by the last resolution referred to, assented to the construction of a double track railroad upon and along the following lines and routes:

Route One — Beginning at a point under the ground at or near the *westerly end of Fifth Street and in the middle line thereof at low water mark,* on the east side of the East River in said city; thence running easterly beneath streets and private property to a point at or near the intersection of Fourth Street and West Avenue; thence along Fourth Street to or near Van Alst Avenue, with a station hereafter to be located between the easterly shore of the East River and Van Alst Avenue; thence northeasterly by a curved line to Meadow Street; thence along Meadow Street to Beach Street; * * * * * * * * * * * * *

The whole route may be indicated as follows:

A (*New York City*); B (*Dock Property*); C (*East River*); D-E (*Long Island City*); F.

A is 42d street at "a point therein between Tenth and Eleventh avenues," Manhattan.

B is "beneath the surface of 42d street from (at) *its Easterly end,*" Manhattan.

C to *D* is "beneath the waters of the East River upon and along the route of said railroad, between the city of New York and Hunter's Point in Long Island City, as shown in plan and profile, upon the charts filed in the office of our Secretary of State, with the water grant papers of the month of January, 1891."

E is "*At or near* the *westerly end of Fifth Street* and in the middle line thereof *at low water mark,*" Long Island City.

F is Meadow street at Beach street, Long Island City.

Route as Constructed. It will be noted that the route above described differs from the route set forth in the articles of association and from the location of the tunnel as actually constructed. The company claims to have obtained the legal right to make such alterations, but the corporation counsel of the city has denied this. The route as actually constructed is approximately as follows: From a loop at the intersection of Park avenue and 42d street, somewhat below the present subway, the line extends under 42d street, under the wharf property of the city at the end of 42d street, East river, to the west end of 5th street, Long Island City; from thence it runs under private property to 4th street and under 4th street to a point between Jackson and Van Alst avenues. The portion from 42d street to a point between 10th and 11th avenues has not been constructed. The line is com-

posed of two tracks for its entire length and for most of the distance each track is located in a separate tunnel.

A comparison of the route as actually built with the rights granted by the city of New York, the State of New York and Long Island City, shows how a difference of opinion has arisen as to whether the company has obtained the proper legal authority for the construction of a tunnel under dock property in New York city; that is, the section between "B" and "C" in the above diagram. The company claims that the resolution of the Board of Aldermen covers this section. The legal representatives of the city have claimed that jurisdiction over this strip of land 300 feet in width was vested in the Department of Docks and that it was necessary to secure the consent of this department for the construction of the route. The courts have not yet passed upon this point.

City's Efforts to Stop Work. When the company resumed work in 1905 it obtained from the fire commissioner of the city of New York licenses to use and keep explosives at the four shafts where it was prosecuting its work. and later in the year obtained permission from the building department to erect certain temporary structures. About this time there arose considerable discussion regarding the legal right of the company to proceed with the work. Many claim that the company had forfeited its charter because of its failure to complete the tunnel by July 30, 1892, and that it was proceeding illegally.

Upon January 22, 1906, the inspector of combustibles of the fire department, New York city, informed the contractors doing the work that four permits for blasting had been revoked "by direction of the corporation counsel." Two days later the superintendent of buildings informed the contractors that certain building permits had been revoked "for the reason that the right to build this tunnel is disputed." No infractions of the permits themselves were alleged. Thereupon the railroad company brought a suit to stay the revocation of the permits and a preliminary injunction was granted. The main contentions of the corporation counsel in opposing an injunction were that the company was not a legal corporation and that it had no right to construct the tunnel. The case came first before Justice Blanchard of the Supreme Court, who said:—

> "Independent of the foregoing considerations, however, the validity of the plaintiff's franchise, in which a *large amount of capital is invested and great public interests are concerned, cannot properly be determined upon affidavits.* To resolve this question now against the plaintiff would permit such interference with the plaintiff's work as would prevent its completion within the time set therefor, upon which its franchise is conditional. The plaintiff will be irremediably damaged if the doubt were now resolved against it. The defendant, on the other hand, cannot be prejudiced by the postponement. For this reason the court may well refuse to determine the question upon the present motion, and instead may properly make a restraining order permitting the continuance of the work under the alleged franchise until the question may be tried in court according to the rules of evidence. Upon this ground, as well as upon the merits, the plaintiff's motion for a continuation *pendente lite,* of the preliminary injunction, is granted."

The case came on for trial before Mr. Justice Fitzgerald in June, 1906, who concluded that:—

(1) "The plaintiff had acquired at the time of the beginning of this action, and now has, due legal power and lawful authority to construct and operate its tunnel and railroad."

(2) "There was *no warrant* or authority in law for *the attempted revocation of any of said licenses and permits*, either for the use of explosives or for temporary buildings; and said licenses and permits were and are of full force and effect."

(3) "*The time of the plaintiff to complete the construction of its tunnel will expire on the 31st day of December*, 1906."

In his opinion, Mr. Justice Fitzgerald said:

"The validity of plaintiff's incorporation under the provisions of the General Railroad Act of 1850, as affected by various subsequent statutes, particularly the prohibition of chapter 10, Laws of 1860, applicable only to the city of New York, the constitutionality of the Tunnel Act, chapter 582, Laws of 1880, the alleged failure of defendant in any event to comply with its provisions, the legality of the consents of the local authorities and of the abutting owners, the lapsing by expiration of time of the defendant's franchises and its failure to comply with statutory requirements in the matter of the change of route, were all sharply presented and definitely determined,"

when the matter was before Mr. Justice Blanchard. Accordingly a decision was rendered for the company.

As to the contention of the city that the railroad company had failed to obtain the consent of the Dock Department for the 300-foot strip referred to above, Mr. Justice Fitzgerald said:

"It is claimed that this land under water is within the exclusive control of the Dock Department and that no action of the Board of Aldermen can confer any right of way or easement under this portion of the bed of the East River. * * * This is a proposition not affecting the validity of plaintiff's charter, but challenging its right to construct its tunnel upon a portion of its designated route. It does not appear that any application for consent was made and refused, nor was the failure to obtain such consent made a ground for the revocation of the permits. There is some suggestion of acquiescence. If plaintiff becomes a trespasser it does so at its peril, and no adjudication now can deprive the city or the Dock Department of their remedies, while irreparable loss might result to the plaintiffs if it were, by the revocation of permits, prevented from prosecuting a work the failure to complete which within a short period of time might involve the forfeiture of its charter and the consequent loss of the vast sums of money already expended."

The Case in the Appellate Division. The appeal from this judgment was argued in the Appellate Division in October, 1907, and the Appellate Division, by unanimous opinion, affirmed the judgment of Mr. Justice Fitzgerald.

Although the case was not decided until 1907, it was begun in 1906, and therefore the court did not assume to decide these two questions:—

(1) The effect of the failure of the company to construct and operate its road by the prescribed time, namely, January 1, 1907.

(2) The effect of the failure to get the consent of the dock department of the city of New York for a portion of its road as at present constructed. The Appellate Division did say, however:—

> "The articles of association were filed on the 30th of July, 1887; the company entered into a contract for the construction of its road in June, 1890; work was begun thereunder, and by July 30th, 1892, upwards of ten per cent. of the capital had been expended. The time for completion had been extended by chapter 700 of the Laws of 1895; 647 of the Laws of 1901; 487 of the Laws of 1902; 597 of the Laws of 1903, to January 1st, 1907. As this case was commenced in February, 1906, and tried in June of the same year, *the time limit for completion had not expired.*"

As to the second question, the Appellate Division said:—

> "For the purposes of this suit *it is unnecessary to decide where the power is lodged.* The permits at bar were not revoked because the permission of the Dock Department had not been granted to pierce this strip of land under water."

Direct Action Brought by the City. In February, 1907, an action was brought by the city of New York against The New York and Long Island Railroad Company, the substance of this action being that the *corporate existence and powers* of the railroad company ceased January 1, 1907, that its work since that time had been carried on without legal authority and that its franchises were forfeited and void. The city asked judgment permanently enjoining and restraining the construction and operation of the railroad. To this complaint the company demurred, and the demurrer was argued before Mr. Justice Davis of the Supreme Court, in October, 1907.

Mr. Edward P. Bryan, president of the Interborough Rapid Transit Company, testified before the Commission upon August 20, 1907, that he was chairman of the board of *trustees* of The New York and Long Island Railroad Company. He also stated that the company ceased to have a board of *directors* about January 1, 1907, when the board became a board of *trustees* "practically under the advice of our legal department." He further testified that all the corporate assets which prior to January 1, 1907, were under the direction or control of the board of directors of the company, were then (August 20, 1907) under the direction and control of the board of trustees and that he signed himself not as president of the company, but as chairman of the board of trustees.

Mr. Justice Davis, in his opinion handed down December 9, 1907, ruled that the demurrer put in by the company was not properly interposed. He said:

> "The failure of the defendant to comply with the Railroad Law as to completion and operation of the railroad was *ipso facto* an extinction of the corporation, and it does not require the bringing of an action to dissolve the corporation (Matter of Brooklyn, Winfield & Newtown R'y, 72 N. Y., 245). *And the so-called franchises mentioned in the complaint*

were immediately extinguished (see Brooklyn, Q. Co. & Sub. R. R., 185 N. Y., 185).

"It thus appears from the complaint that the action is brought against a defendant that has no existence. The defendant being dead in the sense referred to above there can be no pleading to the complaint on behalf of that defendant. * * *

"*I do not agree with the demurrant's view that the property rights and franchises mentioned in the complaint survive the extinction of the defendant's corporate existence and pass to the directors as trustees for the benefit of those concerned,* and that these trustees are the proper parties defendant. If this were so the trustees might take their own time to build the road and thus defeat the very purpose of the statute to insure a speedy completion of the work for public uses (Matter of B'klyn, Q. Co. & Sub. R. R., 185 N. Y., 171, 185). * * * My conclusion is that the demurrer is not properly interposed and has no standing in the case. The demurrer really admits that there is no defendant here. As a matter of fact there is no action pending, nor was there at the time the demurrer was served. Submit decision and judgment in accordance with these views."

Present Condition. Such was the situation of the litigation at the end of the year. The tunnel was almost if not quite completed, and it is stated that operation could be begun in a short time so far as physical conditions are concerned. Cars have actually been run through for purposes of inspection, but not for public use. The stock of The New York and Long Island Railroad Company is practically all owned by the Interborough Rapid Transit Company, which has furnished the funds to build the line (see Mr. Bryan's evidence before the Commission in the Interborough-Metropolitan investigation). The same company owns practically all of the stock of the New York and Queens County Railway Company, the company that operates the street car lines in Long Island city and most of the borough of Queens. Thus the Interborough company controls the subway in Manhattan, with which the Steinway tunnel would at present naturally connect, the Steinway tunnel itself and also the surface lines in Queens which are naturally the feeders of the tunnel. It would easily be possible within a short time to make an operating connection between the tunnel and the Queens surface lines. In Manhattan a transfer station certainly could be built and possibly an operating connection provided. But no proposition has been made to the Commission by any company looking to this end.

The following statement has been filed with the Commission of the expenditures of the Interborough Rapid Transit Company in connection with its acquisition of the stock, etc., of the New York and Long Island Railroad Company and the construction of the tunnel, including the estimates of the amounts required to complete the work by the chief engineer of the company:

Original cost to the Interborough Rapid Transit Company of franchises, etc.	$402,035 17
Cost of real estate (see Schedule "A" hereto annexed)	917,693 94
Cost of construction and equipment (see Schedule "B" hereto annexed)	6,126,151 67
Total, exclusive of interest accrued	$7,445,880 78

Interest at 4 per cent. per annum to July 15, 1907:		
On Interborough Rapid Transit Company's original investment	$54,490 05	
On real estate purchases	58,142 95	
On loans and construction account advances from the Interborough Rapid Transit Company to or for the account of the New York and Long Island Railroad Company	114,499 19	
		227,132 19
Grand total		$7,673,012 97
If interest is computed at 5 per cent. per annum the cost is		$7,729,796 01
If interest is computed at 6 per cent. per annum the cost is		$7,786,579 05

NOTE.— We have certain claims against the Pennsylvania Railroad Company and others from which $40,000 will be realized, in the judgment of the Chief Engineer; the plant, it is estimated, will bring about $160,000; a total credit of $200,000, to be deducted from the figures shown hereinabove.

Auditor's Office, New York, July 16, 1907.

APPENDIX D.

INTER-COMPANY STOCKHOLDINGS.

APPENDIX D.

STOCKHOLDING OF RAILROAD CORPORATIONS, STREET RAILROAD CORPORATIONS, EXPRESS COMPANIES AND GAS AND ELECTRIC CORPORATIONS WITHIN THE FIRST DISTRICT, AS OF JULY 1, 1907.

CLASS I.

Corporations Holding Stock in Other Companies Incorporated Under the Laws of the State of New York.

NAME.	Par value of shares held.	Company issuing said shares so held.	Par value of total stock issued by said company so controlled.	Percentage of stock of said company held elsewhere.
A. RAILROAD AND STREET RAILROAD CORPORATIONS:				
Bklyn City & Newtown R. R. Co	$10,000 00	DeKalb Av. & No. Beach R. R. Co	$10,000	.....
Bklyn R. T. Co	50,000 00	Bridge Operating Co	100,000	50.00
	1,999,100 00	Bk., Qu. Co. & Sub. R. R	2,000 000	.04
	198,700 00	Bk. Hts. R. R. Co	200,000	.65
	pfd. 4,785,485 39	B. U. E. R. R. Co	5,000,000	4.29
	com. 12,530,030 63	B. U. E. R. R. Co	13,000,000	4.03
	349,100 00	C. I. & Gravesend Ry. Co	350,000	.25
	pfd. 6,367,075 00	Nassau Elec. R. R. Co	6,500,000	1.81
	com. 8,499,700 00	Nassau Elec. R. R. Co	8,500,000	.01
	649,100 00	Sea Beach Ry. Co	650,000	.25
	499,100 00	So. Bk. Ry. Co	500,000	.18
Coney Island & Bklyn R. R. Co	1,923,400 00	Bk. City & Newtown R. R. Co	1,923,400	.....
Inter-Met. Co	33,912,800 00	Interboro R. T. Co	35,000,000	3.11
	42,740,000 00	Met. St. Ry. Co	52,000,000	17.80
Interborough Rapid Transit Co	3,194,500 00	N. Y. & Queens Co. Ry. Co	3,235,000	1.26
	49,750 00	City Is. R. R. Co	50,000	.50
	49,525 00	Pelham Pk. R. R. Co	50,000	.95
	297,500 00	L. I. Elec. Ry. Co	600,000	50.41
	pfd. 125,000 00	N. Y. & L. I. Traction Co	pfd. 250,000	50.00
	com. 365,500 00	N. Y. & L. I. Traction Co	com. 750,000	51.34
	93,800 00	N. Y. & L. I. R. R. Co	100,000	6.20
	2,741,000 00	N. Y. City Interb. Ry. Co	5,000,000	45.18
	25,000 00	Ft. George St. Ry. Co	25,000	.....
Met. Securities Co	13,000,000 00	N. Y. C. Ry. Co	13,000 000	.....
	157,000 00	Second Ave. R. R. Co	2,500,000	93.72
Met. St. Ry. Co	1,400,000 00	B'way & 7th Ave. R. R	2,100,000	33.33
	990,000 00	34th St. Cross. R. R	1,000 000	1.00
	300,000 00	Cen. Pk. North & East River R. R. Co	300,000	.....
	2,991,000 00	Ft. George & 11th Ave. R. R. Co	3,000,000	.30

Manhattan Beach Co		46,500 00	Mar. Ry. Co		50,000	7.00
Millbrook Co		9,158,100 00	N. Y. & P. Ches. R. R		9,158,100	.....
N. Y. & Port Chester R. R. Co		7,359,550 00	N. Y. West. & Boston Ry. Co		19,000,000	61.30
N. Y. City Ry. Co		1,671,100 00	42d, Man. & St. Nich. Av. Ry. Co		2,500,000	33.10
		1,128,700 00	Dry Dock, E. B'way & Bat. R. R. Co		1,200,000	5.90
		2,000,000 00	Union Ry. Co. of N. Y. City		2,000,000	.....
		992,500 00	Yonkers R. R. Co		1,000,000	.75
		500,000 00	Westchester Elec. R. R. Co		500,000	.....
		248,300 00	Southern Boulevard R. R. Co		250,000	.68
		300,000 00	Tarrytown, W. P. & M. Ry. Co		300,000	.....
		50,000 00	Bridge Operating Co		100,000	50.00
Richmond Light & R. R. Co		127,500 00	Southfield Bch. R. R. Co		250,000	49.00
Union Ry. Co		51,800 00	Bronx Traction Co		58,100	10.90
B. EXPRESS COMPANIES:						
Adams Express Co. (bondholders of)		906,000 00	United States Express Co		10,000,000	90.90
American Express Co		484,600 00	National Express Co		500,000	3.08
		1,000,000 00	United States Express Co		10,000,000	90.00
	pfd.	143,600 00	Westcott Express Co		150,000	4.20
	com.	497,650 00	Westcott Express Co		500,000	.47
Southern Express Co		70,000 00	United States Express Co		10,000,000	99.30
		111,800 00	Adams Express Co		12,000,000	99.10
		118,500 00	American Express Co		18,000,000	99.30
United States Express Co		5,000 00	Borough Express		5,000	.....
		5,000 00	6th Ave. R. R.		2,000,000	99.75
C. GAS AND ELECTRIC COMPANIES:						
Bklyn. Union Gas Co		20,000 00	Woodhaven Gas Co		20,000	.....
		200,000 00	Flatbush Gas Co		200,000	.....
		60,000 00	Newtown Gas Co		60,000	.....
		250,000 00	Richmond Hill & Q. Co. G. L. Co		250,000	.....
		200,000 00	Jamaica Gas Light Co		200,000	.....
Central Union Gas Co		760,000 00	Northern Union Gas Co		1,500,000	49.33
Consolidated Gas Co		500,000 00	Astoria Lt., H. & P. Co		500,000	.....
	pfd.	8,991,300 00	New Amsterdam Gas Co		9,000,000	.09
	com.	12,154,200 00	New Amsterdam Gas Co		12,165,000	.08
		45,041,000 00	N. Y. Edison Co		45,051,000	.02
		1,886,200 00	N. Y. Mutual Gas-Light Co		3,500,000	.46
	pfd.	4,096,100 00	Standard G. L. Co		4,295,700	4.60
	com.	4,796,200 00	Standard G. L. Co		5,000,000	4.00
	pfd.	1,641,800 00	United Elec. L. & P. Co		1,649,500	.47
	com.	3,654,000 00	United Elec. L. & P. Co		3,697,100	1.00
	pfd.	2,500,000 00	Westchester Lighting Co		2,500,000	.....
	com.	10,000,000 00	Westchester Lighting Co		10,000,000	.....
Edison Elec. Ill. Co. of Bklyn		487,800 00	Amsterdam Elec. Lt., H. & P. Co		500,000	2.44
Kings Co. Elec. Lt. & P. Co		5,000,000 00	Edison Elec. Ill. Co. of Bklyn		5,000,000	.....
New Amsterdam Gas Co		3,500,000 00	Central Union Gas Co		3,500,000	.....
		740,000 00	Northern Union Gas Co		1,500,000	50.70
N. Y. Edison Co		1,658,000 00	Consol. Teleg. & Elec. Subway Co		3,000,000	44.70
United Elec. Lt. & P Co		999,000 00	Brush Elec. Ill. Co		1,000,000	.10

STOCKHOLDING OF RAILROAD CORPORATIONS, STREET RAILROAD CORPORATIONS, EXPRESS COMPANIES AND GAS AND ELECTRIC CORPORATIONS WITHIN THE FIRST DISTRICT, AS OF JULY 1, 1907.

CLASS II.

Corporations Whose Stock is Held by Other Corporations Under the Jurisdiction of the Commission in the First District.

NAME.	Par value of stock issued.	Par value of stock held by other companies.	Companies holding said stock.	Percentage of stock not so held.
A—RAILROAD AND STREET RAILROAD CORPORATIONS:				
Bridge Operating Co	$100,000	$50,000 00	N. Y. City Ry. Co	
		50,000 00	B. R. T. Co	.....
Broadway & Seventh Avenue R. R. Co	2,100,000	1,400,000 00	Met. St. Ry. Co. (cestui)	33.30
Bronx Traction Co	58,100	51,800 00	Union Ry. Co	10.90
Brooklyn City & Newtown R. R. Co	1,923,400	1,923,400 00	Coney Is. & Bk. R. R. Co	.....
Brooklyn City R. R. Co	12,000,000	10,000 00	N. Y. & E. River Ferry Co	99.20
Brooklyn Heights R. R. Co	200,000	198,700 00	B. R. T. Co. (cestui)	.65
Brooklyn, Queens Co. & Suburban R. R. Co	2,000,000	1,999,100 00	B. R. T. Co. (cestui)	
		185 39	B. R. T. Co	.04
Brooklyn Union Elevated R. R. Co	pfd. 5,000,000	4,785,300 00	B. R. T. Co. (cestui)	4 00
	com. 13,000,000	12,527,000 00	B. R. T. Co. (cestui)	
		3,030 63	B. R. T. Co	4.00
Central Park North & East River R. R. Co	300,000	300,000 00	Met. St. Ry. Co. (cestui)	.....
City Island R. R. Co	50,000	49,750 00	Inter. R. T. Co	.50
Coney Island & Gravesend R. R. Co	350,000	349,100 00	B. R. T. Co. (cestui)	.25
De Kalb Avenue & North Beach R. R. Co	10,000	10,000 00	Bk. City & Newtown R. R. Co	.....
Dry Dock, E. By. & Batt. R. R. Co	1,200,000	1,128,700 00	N. Y. C. Ry. Co	5.90
Fort George & Eleventh Avenue R. R. Co	3,000,000	2,991,000 00	Met. St. Ry. Co	.30
Fort George St. Ry. Co	25,000	25,000 00	I. R. T. Co	.....
42d St., Manville & St. N. Co	2,500,000	1,671,100 00	N. Y. C. Ry. Co	33.10
Interborough Rapid Transit Co	35,000,000	33,912,800 00	Inter.-Met. Co. (cestui)	3.11
Jamaica & South Shore R. R. Co	500,000	488,500 00	L. I. Cons. Electrical Cos	2.30
Long Island Electric Ry. Co	600,000	297,500 00	Inter. R. T. Co	
		298,000 75	L. I. Cons. Electrical Cos	49.85
Manhattan Ry. Co	60,000,000	10,000 00	N. Y. & E. River Ferry Co	99.98
Marine Ry. Co	50,000	46,500 00	Manhattan Beach Co	7.00

Met. St. Ry. Co		52,000,000	42,740,000 00	Inter.-Met. Co	17.80
Nassau Elec. R. R. Co	pfd.	6,500,000	6,361,975 00	B. R. T. Co. (cestui)	1.81
			5,100 00	B. R. T. Co.	
	com.	8,500,000	8,499,700 00	B. R. T. Co. (cestui)	.01
New Y. & L. I. Traction Co	pfd.	250,000	125,000 00	Inter. R. T. Co.	.50
			125,000 00	L. I. Cons. Electrical Cos.	
	com.	750,000	365,500 00	Inter. R. T. Co.	2.50
			366,000 00	L. I. Cons. Electrical Cos.	
N. Y. & Port Chester R. R. Co		9,158,100	9,158,100 00	Millbrook Co.	.....
N. Y. & Queens Co. Ry. Co.		3,235,000	3,194,500 00	Inter. R. T. Co.	1.26
N. Y. & Rockaway Beach Ry. Co.		1,000,000	965,700 00	Long Is. R. R. Co.	2.78
			6,500 00	Dirs. for L. I. R. R. Co.	
N. Y., Brooklyn & Manhattan Beach Ry. Co.	pfd.	650,000	316,600 00	L. I. R. R. Co.	51.30
	com.	350,000	345,500 00	L. I. R. R. Co.	.....
			4,500 00	Dirs. for L. I. R. R. Co.	
N. Y. City Inter. Ry. Co.		5,000,000	2,741,000 00	Inter. R. T. Co.	45.18
N. Y. City Ry. Co.		13,000,000	13,000,000 00	Met. Securities Co.	3.90
N. Y. Connecting R. R. Co.		2,916,400	1,457,300 00	Penn. R. R.	.10
			1,457,000 00	N. Y., N. H. & H. R. R. Co.	
N. Y., Westchester & Boston Ry. Co.		19,000,000	7,359,550 00	N. Y. & Port Chester R. R. Co.	61.30
Ocean Electric Ry. Co.		35,000	30,000 00	L. I. Cons. Electrical Cos.	.....
			5,000 00	Dirs. for above Co.	
Pelham Park Railroad Co.		50,000	49,525 00	Inter. R. T. Co.	.95
Penn. Tunnel & Terminal R. R. Co.		25,000,000	25,000,000 00	Penn. R. R. Co.	.....
Prospect Park & Coney Island R. R. Co.		250,000	153,900 00	L. I. R. R. Co. (cestui)	31.86
			16,200 00	Dirs. for the above Co.	
			250 00	Park Ave. R. R. Co.	
Sea Beach Ry. Co.		650,000	649,100 00	B. R. T. Co. (cestui)	.25
Second Avenue R. R. Co.		2,500,000	10,000 00	N. Y. & E. River Ferry Co.	33.20
			157,000 00	Met. Sec. Co.	
Sixth Avenue R. R. Co.		2,000,000	5,000 00	U. S. Exp. Co.	99.75
South Brooklyn Ry. Co.		500,000	499,100 00	B. R. T. Co. (cestui)	.18
Southern Boulevard R. R. Co.		250,000	248,300 00	N. Y. C. Ry. Co. (cestui)	.68
Southfield Beach R. R. Co.		250,000	127,500 00	Rich. Lgt. & R. R. Co.	49.00
Staten Island Ry. Co.		1,050,000	1,016,850 00	Balt. & Ohio R. R. Co.	3.20
Staten Island Rapid Transit Ry. Co.		500,000	498,200 00	Balt. & Ohio R. R. Co.	.30
Tarrytown, W. Pl. & Mam. Ry. Co.		300,000	300,000 00	N. Y. C. Ry. Co.	.....
Thirty-fourth Street Crosstown R. R. Co.		1,000,000	990,000 00	Met. St. Ry. Co (cestui)	1.00
Union Ry. Co. of New York City		2,000,000	2,000,000 00	N. Y. City Ry. Co. (cestui)	.....
Westchester Electric R. R. Co.		500,000	500,000 00	N. Y. City Ry. Co. (cestui)	.....
Yonkers Railroad Co.		1,000,000	992,500 00	N. Y. City Ry. Co. (cestui)	.75
B—EXPRESS COMPANIES:					
Adams Express Co.		12,000,000	111,800 00	Southern Exp. Co.	99.10
American Exp. Co.		18,000,000	3,000,000 00	N. Y. C. & H. R. R. Co.	90.80
			340,000 00	American Exp. Co.	
			118,500 00	Southern Exp. Co.	
Borough Express Co.		5,000	5,000 00	U. S. Exp. Co.	.....
National Express Co.		500,000	484,600 00	Amer. Exp. Co.	3.08

STOCKHOLDING OF RAILROAD CORPORATIONS, ETC.— CLASS II — (*Continued*).

NAME.	Par value of stock issued.	Par value of stock held by other companies.	Companies holding said stock.	Percentage of stock not so held.
B—EXPRESS COMPANIES—(*Continued*).				
United States Express Co	$10,000,000	$906,000 00	Bondholders of Adams Ex. Co. (cestuis)	80 24
		1,000,000 00	American Express Co	
		70,000 00	Southern Express Co	
Westcott Express Co	pfd. 150,000	143,600 00	Amer. Exp. Co	4.20
	com. 500,000	497,650 00	Amer. Exp. Co	.47
C—GAS AND ELECTRIC COMPANIES:				
Amsterdam Electric Light, Heat & Power Co	500,000	487,800 00	Edison Elec. Illu. Co. of Bklyn	2.44
Astoria Lt. H. & P. Co	500,000	500,000 00	Cons. Gas Co	.....
Brush Electric Illuminating Co	1,000,000	999,000 00	United Elec. L. & P. Co	.10
Central Union Gas Co	3,500,000	3,500,000 00	New Amster. Gas. Co	.....
Consolidated Gas Co	8,000,000,000	20,000 00	N. Y. & E. River Ferry Co	99.98
Edison Electric Illuminating Co	5,000,000	5,000,000 00	Kings Co. E. L. & P. Co	.....
Flatbush Gas Co	200,000	200,000 00	Bklyn Union Gas. Co	.....
Jamaica Gas Light Co	200,000	200,000 00	Bklyn Union Gas. Co	.....
Long Acre Electric Light & Power Co	50,000	50,000 00	Manhattan Transit Co	.....
New Amsterdam Gas Co	pfd. 9,000,000	8,991,300 00	Con. Gas. Co	.09
	com.12,165,000	12,154,200 00	Con. Gas. Co	.08
New York Edison Co	45,051,000	45,041,000 00	Con. Gas. Co	.02
Newtown Gas Co	60,000	60,000 00	Bklyn Union Gas Co	.....
New York Mutual Gaslight Company	3,500,000	1,886,200 00	Con. Gas. Co	46.10
Northern Union Gas Co	1,500,000	760,000 00	Central Union Gas Co	.....
		740,000 00	New Amster. Gas Co	
Richmond Hill & Queens County Gaslight Co	250,000	250,000 00	Bklyn Union Gas Co	.....
Standard Gaslight Co	pfd. 4,295,700	4,096,100 00	Con. Gas. Co	4.00
	com. 5,000,000	4,796,200 00	Con. Gas. Co	4.00
United Electric Light & Power Co	pfd. 1,649,500	1,641,800 00	Con. Gas. Co	.47
	com. 3,697,100	3,654,000 00	Con. Gas. Co	.....
Westchester Lighting Co	pfd. 2,500,000	2,500,000 00	Con. Gas. Co	.....
	com.10,000,000	10,000,000 00	Con. Gas. Co	.....
Woodhaven Gaslight Co	20,000	20,000 00	Bklyn Union Gas Co	.....

STOCKHOLDING OF RAILROAD CORPORATIONS, STREET RAILROAD CORPORATIONS, EXPRESS COMPANIES AND GAS AND ELECTRIC CORPORATIONS WITHIN THE FIRST DISTRICT, AS OF JULY 1, 1907.

CLASS III.

Corporations None of Whose Shares are Held by Other Companies and Which Do Not Hold Any Shares of Other Companies Within the First District.

NAME.	Capital stock authorized.	Number of shares authorized.	Number of shares issued.	Par value of shares.
A—RAILROAD AND STREET RAILROAD CORPORATIONS:				
Atlantic Avenue Elevated R. R. Co	$1,000,000	10,000	10,000	$100
Bleecker Street & Fulton Ferry R. R. Co	900,000	9,000	9,000	100
Brooklyn, Newtown & Brighton Beach R. R. Co	100,000	1,000	110	100
Bush Terminal R. R. Co	20,000	200	200	100
Canarsie R. R. Co	250,000	2,500	2,500	100
Central Crosstown R. R. Co	600,000	6,000	6,000	100
Christopher & 10th Street R. R. Co	650,000	6,500	6,500	100
Eighth Avenue R. R. Co	1,000,000	1,000	1,000	100
Fulton Street R. R. Co	500,000	5,000	5,000	100
Glendale & East River R. R. Co	500,000	5,000	971	100
Hudson & Manhattan R. R. Co	50,000,000	pfd. 100,000	52,500	100
		com. 400,000	400,000	100
Jerome Park Ry. Co	50,000	500	500	100
Kingsbridge Ry. Co	1,000,000	10,000	8,600	100
Newtown Creek Terminal Co	100,000	1,000	162	100
New York & Coney Island R. R. Co	100,000	1,000	1,000	100
New York & East River R. R. Co	2,500,000	25,000	1,704	100
New York & Jersey City Terminal Underground R. R. Co	100,000	1,000	100	100
New York Western & Connecticut Traction Co	600,000	6,000	6,000	100
Ninth Avenue R. R. Co	800,000	8,000	8,000	100
Prospect Park & South Brooklyn R. R. Co	50,000	500	500	100
Rapid Transit Underground R. R. Co	100,000	1,000	1,000	100
Richmond Beach Ry. Co	20,000	200	100	100
Spuyten Duyvil & Port Morris R. R. Co	989,000	9,890	9,890	100
Staten Island Midland Ry. Co	1,000,000	10,000	10,000	100
Third Avenue R. R. Co	40,000,000	400,000	159,958	100
28th & 29th Streets Crosstown R. R. Co	1,500,000	15,000	15,000	100
Van Brunt Street & Erie Basin R. R. Co	200,000	20,000	20,000	10

Wall & Cortlandt Streets Ferry Ry. Co	1,000,000	10,000	10,000	100
West 10th Street Consolidated Ry. Co	10,000	100	100	100
Williams Terminal Ry. Co	10,000	100	35	100
C—GAS AND ELECTRIC CORPORATIONS:				
Bowery Bay Electric Light & Power Co	10,000	100	35	100
Bronx Gas & Electric Co	500,000	5,000	4,865	100
Brooklyn Borough Gas Co	500,000	5,000	5,000	100
Kings County Lighting Co	2,000,000	20,000	20,000	100
New York & Queens Gas Co	600,000	6,000	6,000	100
New York & Queens Electric Light & Power Co	2,500,000	25,000	25,000	100
New York & Richmond Gas Co	1,500,000	15,000	15,000	100
Queens Borough Gas & Electric Co	2,000,000	20,000	20,000	100
Richmond Light & R. R. Co	3,000,000	30,000	28,717½	100

NOTE.— From the above tabulation it appears that the Interborough-Metropolitan Company, by holding the stock of the Interborough Rapid Transit Company and the Metropolitan Street Railway Company, controls the subway, elevated, and surface transit facilities of the boroughs of Manhattan and the Bronx and of a large portion of the borough of Queens. The transit facilities of the borough of Brooklyn are almost entirely in the hands of the Brooklyn Rapid Transit Company and its eight subsidiary companies. The only independent street railway company is the Coney Island and Brooklyn Railroad Company, which owns all the stock of the Brooklyn City and Newtown Railroad Company, and through it the DeKalb Avenue and North Beach Railroad Company.

The entire supply of both gas and electricity in Manhattan and the Bronx is controlled either directly or indirectly by the Consolidated Gas Company, which also controls the Consolidated Telegraph and Electrical Subway Company — the company which owns the ducts for high tension distribution. In Brooklyn and Queens, the Brooklyn Union Gas Company is virtually supreme in the gas field because of its ownership of five gas companies. The Kings County Electric Light and Power Company controls the Edison Electric Illuminating Company of Brooklyn, and through it the Amsterdam Electric Light and Power Company, thus covering the electric light, heat, and power field.

APPENDIX E.

THE TESTING OF GAS METERS.

APPENDIX E.

THE TESTING OF GAS METERS.

PUBLIC SERVICE COMMISSION.

NEW YORK, *September* 20, 1907.

To the Public Service Commission for the First District:

SIRS.— Your committee to whom was referred the question of the testing of gas meters, begs to submit the following report:

The Public Service Commissions Law of 1907 transferred the powers and duties of the State Inspector of Gas Meters within the area of Greater New York to this Commission. It became incumbent upon the Commission, therefore, to provide a system for the inspection, testing and sealing of gas meters, and a committee was accordingly appointed.

Your committee first ascertained the methods which had been used by the State inspector, hoping to be able to recommend their continuance, so that the work might proceed without any interruption or delay. It was found, however, that meters had been stamped by the State inspector that had not been tested, i. e., that a few sample meters were selected from a large number of new meters and the entire consignment approved upon the basis of a test of a few meters. It was also found that the brass tag affixed to the meters by the State inspector was so attached that a meter might be changed, repaired, or completely overhauled without destroying or affecting the tag in any way. The system of computing the percentage of inaccuracy was also found to be wrong.

These facts made it quite apparent to your committee that, in order to comply with the purpose and letter of the statute, which required that every meter be "inspected, approved and sealed," an entirely new system should be devised which would provide for thorough and accurate inspection, impartial testing and a method of sealing which would not permit the meter to be opened without breaking the seal.

Your committee recommended that Mr. A. E. Forstall, a consulting gas engineer, be employed by the Commission to prepare and submit such a scheme, and this recommendation was adopted by you. Mr. Forstall's report, with the exception of certain blank forms and instructions to testers, is submitted herewith. The instructions and forms are on file in the office of this Commission.

With Mr. Forstall's report as a basis, a method of proving and sealing meters was formulated, a staff of meter testers organized and actual work begun, with the approval of the Commission. This system has now been in operation over two months and has proved to be satisfactory except in a few minor details, which will need to be altered when sufficient experience has

been had to demonstrate the precise way in which improvements may be made. The essential features of the scheme are as follows:

1. That every meter shall be inspected, approved and sealed before being put into use.

2. That the "sealing" shall be of such a nature that the meter cannot be opened, altered or changed in any way without the breaking of this seal, thereby making it necessary to reinspect, reapprove and reseal before the meter may again be put into use.

3. That at present the testing of meters be limited to the accuracy of registration, ordinarily called the "check" test. This seems to be the best practice and is generally adopted, with a few exceptions. This matter is discussed in Mr. Forstall's report.

4. That any meter regarding which complaint shall be made shall be tested by an employee of the Commission.

5. That the fee to be paid by the applicant if the meter is slow or correct within the limits allowed by the law, or by the company if the meter is fast beyond the percentage fixed in the statutes, shall be as small as may be reasonable.

6. That a notice be sent to the complainant and to the company of the results of such inspection.

7. That an adequate number of meter testers be employed, so that there will be no delay, either to the consumer or to the company in the testing of meters.

In pursuance of this plan eleven testing stations have been established already; two are at the factories of two meter companies, and nine at the shops of seven gas companies. At the present moment, sixteen testers are at work, and the number will be increased as rapidly as competent men can be secured. The civil service list was exhausted some time ago and difficulty has been encountered in securing a sufficient number of men to proceed with the work as rapidly as desired, but a new list has just been submitted. The number of testing stations will be increased as soon as the companies equip them and the apparatus approved by the inspector of the Commission.

The wages paid meter testers have been fixed by the Commission temporarily at $3 per day for eight hours' work.

The staff of the Commission will probably include one chief inspector, one complaint inspector, and from fifteen to twenty testers at work in the testing stations. Already marked improvement in the work of the testers has been manifest, and the number of meters tested per day per employee is about double the number tested under the State inspector prior to July 1, 1907.

So far as the work of the Commission is concerned, there are four classes of meters:

1. New meters; those not having been used previously.

2. Repaired meters; those having been used, removed from the consumers' premises, but not on complaint, and repaired by the companies.

3. Complaint meters; those whose accuracy has been questioned in a complaint to the Commission.

4. Removed meters; those that have been in use, removed from the consumers' premises, but not on complaint, and not repaired.

The testing of these meters is now being performed under the following instructions:

WORK OF RECORD CLERK.

(A) *Complaint Meters.*

(1) When the application is made in person, the clerk may fill out application blank, form G1 or G2, and have it signed, one blank being used for each meter. If the fee is paid, a receipt (form G3) shall be given, the stub being detached and retained until the complaint is settled. The companies are to be billed monthly for the amounts due. When the application is made by letter, form G1 or G2 shall be filled out by the clerk, so far as possible from the data given in the letter. When the application is made by a company, the clerk shall fill out and send to the company form G17.

(2) The clerk shall then take two cards (form G4), one white and one yellow, which cards shall be exact duplicates, numbered serially with the application number and used in order of these numbers, and enter upon them the date, the name and full address of the person making the application, the name of the gas company supplying the premises, the amount of the fee, and if the size of the meter is known, and if the fee is paid, indicate it by entering the date in the proper space. If not, all of the data called for on forms G1 or G2 are given, the clerk shall send the forms G1 or G2, to the complaint inspector, to be filled out and returned. When form G1 or G2 has been returned by the inspector, the missing data shall be inserted on form G4, and the application shall be placed on file in alphabetical order according to the name of the applicant. When the white sheet of form G5 has been returned, the clerk shall send this white sheet to the proper gas company to constitute the removal order for the meter, shall enter upon form G4 the date upon which this order has been sent, and shall then send the yellow card of form G4 to the proper tester at the testing station as a notification that the meter described on the card is to be received and tested.

(3) When the card has been returned from the testing station after the test has been recorded, the record clerk shall send notice of the result of the test to the gas company, using for this purpose form G7, and shall also send notice of the result of the test to the consumer, using form G8, except when the application for the test was made by the gas company; then he shall use form G18. After filling out these notices, he shall enter upon form G4 (white and yellow) the dates on which they were sent. If the meter is fast beyond the limits allowed by law, the fee deposited for the test shall be returned to the consumer, as provided in forms G8 and G9, and the record clerk shall enter upon form G4 (white and yellow) and the stub of G3 the date upon which this fee was returned. He shall also enter upon form G4 the date upon which the fee for a fast meter is paid by the gas company. In the case of a meter which is correct or slow, the last two entries are not to be made.

(4) When forms G4 (white and yellow) have been entirely filled out, the white card shall be filed in the proper place alphabetically by the name of the consumer, and the duplicate (yellow) shall be filed in the numerical order of the application.

(5) The record clerk shall keep all fees until the test has been made and the record completed. He shall then deposit them monthly with the city treasurer, and take a receipt therefor, to be deposited with the secretary of the Commission.

(B) *All Meters.*

(6) The record clerk shall file and have charge of the daily reports made by the meter testers. The yellow sheets shall be kept as records until the books for which they are duplicates shall have been filled and returned by the testers, and then these duplicates shall be destroyed.

(7) He shall also make up monthly summaries of tests not later than the fifteenth of the month for the month preceding. For this work he shall use forms G13 to G16, and these forms shall be kept by him on file.

WORK OF CHIEF INSPECTOR.

(8) All apparatus for the testing of meters shall be examined, approved and stamped by the Chief Inspector before being used, and he shall also oversee the proving and sealing of all meters.

WORK OF COMPLAINT INSPECTOR.

(A) *Complaint Meters.*

(9) The complaint inspector to whom an application is assigned shall take the forms sent him, prepare and send out notices when he will call (form G10), and proceed to the premises designated. On arrival there he shall obtain and enter the missing data for the completion of the forms, shall locate the meter, enter its description on the forms and collect the fee, if it has not been paid, entering on the forms the payment of this fee with date and giving the proper receipt for it (form G3) to the consumer. He shall then fill out form G5, detach the white original sheet from the tag and attach the tag to the meter, entering in the proper place on form G4 the date as an indication that the meter has been tagged. At the end of the day he shall send to the record clerk all the copies of form G and all the white sheets of form G5 for the meters to which he has attended, and the receipt stubs (form G3) which he has used. At least once each week he shall account to the clerk for all fees received by him.

WORK OF THE METER TESTERS.

(A) *Complaint Meters.*

(10) Upon receiving form G4 at the testing station, the tester shall look out for the arrival of the meter described on this form, and when it is received, shall enter in the proper place his name and the date of its receipt. He shall then test the meter, after allowing it to remain in the station not less than five hours in order that the temperature may be equalized, within twenty-four hours after its receipt unless the consumer desires to be present at the test and it cannot be arranged to secure his presence within this time limit.

(11) Complaint meters should always be given two tests, and if these two do not agree with each other a third test should be made. If the two tests agree, or if the three tests are made, the average of all the tests shall be taken as representing the condition of the meter. After the test has been made, the tester shall enter the record in the meter test record book, writing

"complaint meter" in the "remarks" column and shall also enter upon form G4 the cubic feet passed by the meter and by the prover and the percentage fast or slow shown by the test. He shall also fill out form G6 and paste it upon the meter, and shall seal the meter in the manner hereinafter prescribed, provided the meter is accurate within the limits allowed by statute. At the end of each day he shall send to the record clerk all the copies of form G4 upon which he has recorded the results of tests during the day.

(B) *All Meters.*

(12) Before beginning work each morning the tester should see that the temperature of the water in the prover is the same as that of the air in the room, the temperature of the water being adjusted if these temperatures are not the same. For the purpose of observing these temperatures two thermometers must be provided, one being placed in the water and the other hung up in the air, and these two thermometers should be checked against each other to see that when exposed to the same conditions their readings are the same. The tester must also be satisfied that the meters which he has to test have been in the immediate vicinity of the provers for a sufficient length of time to have acquired the temperature of the air surrounding the provers. While testing, no direct sunlight should be allowed to strike either the provers or the meters to be tested and the observations of the temperature of the water and of the air shall be made at least every fifteen minutes.

(13) Meters are to be given the check test only, but while making this test the size of the dial is to be observed, and it is to be noted whether this dial is of the proper size for the size of the meter.

(14) After the meter has been connected to the prover, a test for the tightness of the connections must be made by closing the meter outlet with the hand and throwing the prover cock wide open, so that full pressure is thrown on all the connections and the meter, and then shutting the prover cock and watching the pressure gauge to see that the pressure holds. If the pressure does not hold, the connections must be gone over and another test for tightness made before the test of the meter is begun.

(15) From one cubic foot to one and one-half cubic feet of air must be passed through the meter before beginning the test. The object of this is to make certain that the meter is working freely before the test begins.

(16) The proving hand on the dial must be brought to, and stopped at, one of the divisions on the up stroke of this dial and the test started with the hand at such a division and concluded when the hand again reaches this division after making a complete revolution.

(17) Meters showing on the first test a proof of either 99 or 101, or one between these limits, are to be passed on this single test.

(18) Meters showing on the first test a proof between 98½ and 99, or between 101 and 101½, or exactly 98½ or 101½, are to be given a second test, the average of the prover readings and of the percentages of errors for the two tests being recorded and the meter being passed, provided the average proof is more than 98 and not more than 102.

(19) Meters showing on the first test a proof between 98 and 98½, or between 101½ and 102, or exactly 102, are to be given a second test, passing

four cubic feet through three and five-light meters on this second test, and are to be passed if the average proof shown by the two tests is above 98 and not more than 102, the average of the prover readings reduced to the normal two-feet basis for three and five-light meters, and the average of the percentages of error for the two tests being recorded. If necessary, a third test may be made with such meters, but only when there is some doubt as to the accuracy of the first two tests. If the third test is made the average of all three tests is to be taken as being correct, and the meter is to be passed or rejected on this average.

(20) Meters showing a proof of 98, or less than 98, or more than 102 on the first test, or as an average of either two or three tests, as specified above, are to be rejected and returned for readjustment by the company presenting them for test. Form G6 shall be filled out and attached to each meter rejected. After such readjustment the meters are to be again tested.

(21) The bell of the meter prover should be drawn to its full height and the scales wiped the last thing at the end of each day's work and left up during the night. The object of this is to prevent discoloration of the body of the bell and of the scales. Care should be taken that the cocks are shut off tight so that the bell will remain up all night, and by taking the reading on the scale at the time of stopping work and again when work is begun the next morning a test is obtained of the tightness of the prover and the connections up to the prover cock and of this cock itself. In case these readings show that the prover is not tight the leak should be found and remedied before making any tests.

(22) The record of every meter tested shall be recorded in full in the meter test record book, and in the "remarks" column a note shall be made to show whether the meter is a new, repaired, complaint or removed meter, wherever possible.

(23) Every meter ascertained to be correct within the limits allowed by law shall be sealed, and no meter shall be sealed which has been found to be incorrect according to the preceding instructions. The tester should see that the ring is properly placed upon the meter, so that the ring will overlap the seam on the cover. In no case shall a meter be sealed unless the ring is properly placed. Sufficient wax should be poured into the ring so as to permit the making of a clear impression of the seal, and the impression should be clear and easily legible.

A table showing the percentages of errors under varying conditions appears as an appendix to this report.

Respectfully submitted,

(Signed) MILO R. MALTBIE,
Commissioner.

TABLES SHOWING PERCENTAGE OF ERRORS IN METERS WHOSE REGISTRATION DIFFERS FROM THE INDICATIONS OF THE TEST GAS HOLDERS.

Meter Registering Two Feet.

Reading of Scale of Gas Holder. Feet.	Amount of Error. Per Cent.	Reading of Scale of Gas Holder. Feet.	Amount of Error. Per Cent.	Reading of Scale of Gas Holder. Feet.	Amount of Error. Per Cent.
1.80	11.11 fast	1.96	2.04 fast	2.11	5.21 slow
1.81	10.50 fast	1.97	1.52 fast	2.12	5.66 slow
1.82	9.89 fast	1.98	1.01 fast	2.13	6.10 slow
1.83	9.29 fast	1.99	0.50 fast	2.14	6.54 slow
1.84	8.70 fast	2.00	nil	2.15	6.98 slow
1.85	8.11 fast	2.01	0.50 slow	2.16	7.41 slow
1.86	7.53 fast	2.02	0.99 slow	2.17	7.83 slow
1.87	6.95 fast	2.03	1.48 slow	2.18	8.26 slow
1.88	6.38 fast	2.04	1.96 slow	2.19	8.68 slow
1.89	5.82 fast	2.05	2.44 slow	2.20	9.09 slow
1.90	5.26 fast	2.06	2.91 slow	2.21	9.50 slow
1.91	4.71 fast	2.07	3.38 slow	2.22	9.91 slow
1.92	4.17 fast	2.08	3.85 slow	2.23	10.31 slow
1.93	3.63 fast	2.09	4.31 slow	2.24	10.71 slow
1.94	3.09 fast	2.10	4.76 slow	2.25	11.11 slow
1.95	2.56 fast				

Meters Registering Five Feet.

4.50	11.11 fast	4.75	5.26 fast	5.00	nil
4.51	10.86 fast	4.76	5.04 fast	5.01	0.20 slow
4.52	10.62 fast	4.77	4.82 fast	5.02	0.40 slow
4.53	10.38 fast	4.78	4.60 fast	5.03	0.60 slow
4.54	10.13 fast	4.79	4.38 fast	5.04	0.79 slow
4.55	9.89 fast	4.80	4.17 fast	5.05	0.99 slow
4.56	9.65 fast	4.81	3.95 fast	5.06	1.19 slow
4.57	9.41 fast			5.07	1.38 slow
4.58	9.17 fast	4.83	3.52 fast	5.08	1.57 slow
4.59	8.93 fast	4.84	3.31 fast	5.09	1.77 slow
4.60	8.70 fast	4.85	3.09 fast	5.10	1.96 slow
4.61	8.46 fast	4.86	2.88 fast	5.11	2.15 slow
4.62	8.23 fast	4.87	2.67 fast	5.12	2.34 slow
4.63	7.99 fast	4.88	2.46 fast	5.13	2.53 slow
4.64	7.76 fast	4.89	2.25 fast	5.14	2.72 slow
4.65	7.53 fast	4.90	2.04 fast	5.15	2.91 slow
4.66	7.30 fast	4.91	1.83 fast	5.16	3.10 slow
4.67	7.07 fast	4.92	1.63 fast	5.17	3.29 slow
4.68	6.84 fast	4.93	1.42 fast	5.18	3.47 slow
4.69	6.61 fast	4.94	1.21 fast	5.19	3.66 slow
4.70	6.38 fast	4.95	1.01 fast	5.20	3.85 slow
4.71	6.16 fast	4.96	0.81 fast	5.21	4.03 slow
4.72	5.93 fast	4.97	0.60 fast	5.22	4.21 slow
4.73	5.71 fast	4.98	0.40 fast	5.23	4.40 slow
4.74	5.49 fast	4.99	0.20 fast	5.24	4.58 slow

TABLE SHOWING PERCENTAGE OF ERRORS IN METERS WHOSE REGISTRATION DIFFERS FROM THE INDICATIONS OF THE TEST GAS HOLDERS.

Meters Registering Five Feet.— Continued.

Reading of Scale of Gas Holder. Feet	Amount of Error. Per Cent.	Reading of Scale of Gas Holder. Feet.	Amount of Error. Per Cent.	Reading of Scale of Gas Holder. Feet.	Amount of Error. Per Cent.
5.25	4.76 slow	5.38	7.06 slow	5.51	9.26 slow
5.26	4.94 slow	5.39	7 24 slow	5.52	9.42 slow
5.27	5.12 slow	5.40	7.41 slow	5.53	9.59 slow
5.28	5.30 slow	5.41	7.58 slow	5.54	9.75 slow
5.29	5.48 slow	5.42	7.75 slow	5.55	9.91 slow
5.30	5.66 slow	5.43	7.92 slow	5.56	10.07 slow
5.31	5.84 slow	5.44	8.09 slow	5.57	10.23 slow
5.32	6.02 slow	5.45	8.26 slow	5.58	10.39 slow
5.33	6.19 slow	5.46	8.42 slow	5.59	10.55 slow
5.34	6.37 slow	5.47	8.59 slow	5.60	10.71 slow
5.35	6.54 slow	5.48	8.76 slow	5.61	10.87 slow
5.36	6.72 slow	5.49	8.93 slow	5.62	11.03 slow
5.37	6.89 slow	5.50	9.09 slow	5.63	11.19 slow
		Meters Registering Ten Feet.			
9.00	11.11 fast	9.30	7.53 fast	9.60	4.17 fast
9.01	10.99 fast	9.31	7.41 fast	9.61	4.06 fast
9.02	10.86 fast	9.32	7.30 fast	9.62	3.95 fast
9.03	10.74 fast	9.33	7.18 fast	9.63	3.84 fast
9.04	10.62 fast	9.34	7.07 fast	9.64	3.73 fast
9.05	10.50 fast	9.35	6.95 fast	9.65	3.63 fast
9.06	10.38 fast	9.36	6.84 fast	9.66	3.52 fast
9.07	10.25 fast	9.37	6.72 fast	9.67	3.41 fast
9.08	10.13 fast	9.38	6.61 fast	9.68	3.31 fast
9.09	10.01 fast	9.39	6.50 fast	9.69	3.20 fast
9.10	9.89 fast	9.40	6.38 fast	9.70	3.09 fast
9.11	9.77 fast	9.41	6.27 fast	9.71	2.99 fast
9.12	9.65 fast	9.42	6.16 fast	9.72	2.88 fast
9.13	9.53 fast	9.43	6.04 fast	9.73	2.77 fast
9.14	9.41 fast	9.44	5.93 fast	9.74	2.67 fast
9.15	9.29 fast	9.45	5.82 fast	9.75	2.56 fast
9.16	9.17 fast	9.46	5.71 fast	9.76	2.46 fast
9.17	9.05 fast	9.47	5.60 fast	9.77	2.35 fast
9.18	8.93 fast	9.48	5.49 fast	9.78	2.25 fast
9.19	8.81 fast	9.49	5.37 fast	9.79	2.15 fast
9.20	8.70 fast	9.50	5.26 fast	9.80	2.04 fast
9.21	8.58 fast	9.51	5.15 fast	9.81	1.94 fast
9.22	8.46 fast	9.52	5.04 fast	9.82	1.83 fast
9.23	8.34 fast	9.53	4.93 fast	9.83	1.73 fast
9.24	8.23 fast	9.54	4.82 fast	9.84	1.63 fast
9.25	8.11 fast	9.55	4.71 fast	9.85	1.52 fast
9.26	7.99 fast	9.56	4.60 fast	9.86	1.42 fast
9.27	7.87 fast	9.57	4.49 fast	9.87	1.32 fast
9.28	7.76 fast	9.58	4.38 fast	9.88	1.21 fast
9.29	7.64 fast	9.59	4.28 fast	9.89	1.11 fast

TABLE SHOWING PERCENTAGE OF ERRORS IN METERS WHOSE REGISTRATION DIFFERS FROM THE INDICATIONS OF THE TEST GAS HOLDERS.

Meters Registering Ten Feet.— Continued.

Reading of Scale of Gas Holder. Feet.	Amount of Error. Per Cent.	Reading of Scale of Gas Holder. Feet.	Amount of Error. Per Cent.	Reading of Scale of Gas Holder. Feet.	Amount of Error. Per Cent.
9.90	1.01 fast	10.36	3.47 slow	10.81	7.49 slow
9.91	0.91 fast	10.37	3.57 slow	10.82	7.58 slow
9.92	0.81 fast	10.38	3.66 slow	10.83	7.66 slow
9.93	0.70 fast	10.39	3.75 slow	10.84	7.75 slow
9.94	0.60 fast	10.40	3.85 slow	10.85	7.83 slow
9.95	0.50 fast	10.41	3.94 slow	10.86	7.92 slow
9.96	0.40 fast	10.42	4.03 slow	10.87	8.00 slow
9.97	0.30 fast	10.43	4.12 slow	10.88	8.09 slow
9.98	0.20 fast	10.44	4.21 slow	10.89	8.17 slow
9.99	0.10 fast	10.45	4.31 slow	10.90	8.26 slow
10.00	nil	10.46	4.40 slow	10.91	8.34 slow
10.01	0.10 slow	10.47	4.49 slow	10.92	8.42 slow
10.02	0.20 slow	10.48	4.58 slow	10.93	8.51 slow
10.03	0.30 slow	10.49	4.67 slow	10.94	8.59 slow
10.04	0.40 slow	10.50	4.76 slow	10.95	8.68 slow
10.05	0.50 slow	10.51	4.85 slow	10.96	8.76 slow
10.06	0.60 slow	10.52	4.94 slow	10.97	8.84 slow
10.07	0.70 slow	10.53	5.03 slow	10.98	8.93 slow
10.08	0.79 slow	10.54	5.12 slow	10.99	9.01 slow
10.09	0.89 slow	10.55	5.21 clow	11.00	9.09 slow
10.10	0.99 slow	10.56	5.30 slow	11.01	9.18 slow
10.11	1.09 slow	10.57	5.39 slow	11.02	9.26 slow
10.12	1.19 slow	10.58	5.48 slow	11.03	9.34 slow
10.13	1.28 slow	10.59	5.57 slow	11.04	9.42 slow
10.14	1.38 slow	10.60	5.66 slow	11.05	9.51 slow
10.15	1.48 slow	10.61	5.75 slow	11.06	9.59 slow
10.16	1.57 slow	10.62	5.84 slow	11.07	9.67 slow
10.17	1.67 slow	10.63	5.93 slow	11.08	9.75 slow
10.18	1.77 slow	10.64	6.02 slow	11.09	9.83 slow
10.19	1.86 slow	10.65	6.10 slow	11.10	9.91 slow
10.20	1.96 slow	10.66	6.19 slow	11.11	9.99 slow
10.21	2.06 slow	10.67	6.28 slow	11.12	10.07 slow
10.22	2.15 slow	10.68	6.37 slow	11.13	10.15 slow
10.23	2.25 slow	10.69	6.45 slow	11.14	10.23 slow
10.24	2.34 slow	10.70	6.54 slow	11.15	10.31 slow
10.25	2.44 slow	10.71	6.63 slow	11.16	10.39 slow
10.26	2.53 slow	10.72	6.72 slow	11.17	10.47 slow
10.27	2.63 slow	10.73	6.80 slow	11.18	10.55 slow
10.28	2.72 slow	10.74	6.89 slow	11.19	10.63 slow
10.29	2.82 slow	10.75	6.98 slow	11.20	10.71 slow
10.30	2.91 slow	10.76	7.06 slow	11.21	10.79 slow
10.31	3.01 slow	10.77	7.15 slow	11.22	10.87 slow
10.32	3.10 slow	10.78	7.24 slow	11.23	10.95 slow
10.33	3.19 slow	10.79	7.32 slow	11.24	11.03 slow
10.34	3.29 slow	10.80	7.41 slow	11.25	11.11 slow
10.35	3.38 slow				

MR. FORSTALL'S REPORT.

ALFRED E. FORSTALL, CONSULTING ENGINEER,
No. 58 WILLIAM STREET,
NEW YORK, *July* 27, 1907.

Public Service Commission, First District, State of New York, No. 320 *Broadway, New York city:*

GENTLEMEN.— I beg to submit the following report upon the manner in which new and repaired gas meters should be tested and sealed, and also upon the procedure to be followed with regard to applications from gas consumers for an official test of their meters:

TESTS TO BE MADE.

The official testing of gas meters has, in every case with which I am acquainted except two, been confined to testing for accuracy of registration in passing gas at a normal rate. The two exceptions are those of Great Britain, where the Sales of Gas Act, 1859, which governs this testing, provides for a test for "soundness or leakage" to determine whether or not the meter registers a small consumption; and of Minneapolis, where both a test for registration under small consumption and one for regularity of delivery under a large consumption are provided for in addition to the test for accuracy of registration when passing gas at a normal rate.

In my opinion these exceptions to the general rule cover matters that are entirely without the sphere of an official test of gas meters. The only object of such a test is to give the gas consumer an assurance that the instrument employed for measuring the amount of gas that he consumes gives correct measure, and this is fully covered by the test for accuracy of registration when the meter is passing gas at a normal rate. A meter that will not register under a small consumption will register slow under normal conditions, and if the fault is sufficiently serious it will cause the meter to be rejected when tested for accuracy of registration. Irregularity of delivery under a large consumption does not affect the accuracy of registration, and if the gas which is being measured is to be used for fuel purposes it does not even affect the quality of the service unless the irregularity is very pronounced. It therefore is not a matter with which the official testing of the accuracy of the meter as a measure has to do.

I would therefore advise that the only test of a gas meter made by you be that for accuracy of registration when the meter is passing gas at the rate of 6 cubic feet per hour for each "light" of its size.

METHOD OF MAKING TEST.

This test, which is known technically as the "check" test, is made by connecting the meter, with its outlet capped by a check, in which is a circular orifice of such a size that when the pressure on the meter is adjusted to 15–10 inch of water air will pass thro ugh this orifice, and consequently through the meter, at the rate named above, to a "meter prover" and passing from the prover through the meter the amount of air required

to cause the proving hand on the meter dial to make one complete revolution. This revolution corresponds to the registration on the meter dial of a definite quantity of gas, which varies with the size of the meter. The "meter prover," which consists of a holder, that is, an inverted sheet metal bell, guided so as to be capable of moving freely up and down in a sheet metal tank which is filled with water to seal the otherwise open bottom of the holder, carries on the side of the holder a scale graduated in feet and tenths of a foot over its whole length and in hundredths of a foot over a certain portion of its length. The difference between the readings of this scale at the beginning and end of the test shows the volume of air that has actually passed out of the holder and through the meter. If this volume corresponds exactly to that registered by one complete revolution of the proving hand of the meter the latter is correct, while if it is larger the meter is slow, and if it is smaller the meter is fast, the percentage of error in either case being found by dividing the difference between the prover reading and the meter reading by the prover reading. Thus if the prover reading is 2.02 cubic feet, while that of the meter is 2 cubic feet, the meter is $\frac{2}{2.02} = 0.99$ per cent. slow, while if the prover reading is 1.98 cubic feet, while that of the meter is 2 cubic feet, the meter is $\frac{2}{1.98} = 1.01$ per cent. fast.

The accuracy of the graduation of the scale on the meter prover holder is assured by having the graduations marked in the first instance as the result of a careful calibration of the holder by means of a cubic foot bottle certified by the National Bureau of Standards at Washington and by periodical testing by means of such a cubic foot bottle in order to provide against any error arising through deformation of the holder. The prover holders are made with working capacities varying from 2 cubic feet up to 10 cubic feet, and sometimes are made even larger, for use with different sized meters, the 5-cubic-foot size being the most common.

Before making a test it is necessary to have the temperature of the water in the tank of the prover the same as that of the air in the room and that of the meter to be tested. To insure the latter condition the meter must be allowed to stand in the testing room at least five hours before being tested and care must be taken to keep both the prover and the meters to be tested out of the direct rays of the sun.

These and other precautions that should be taken to insure the accuracy of the test are covered in the Instructions for Meter Testers appended to this report.

METHOD OF SEALING.

Meters that have been tested and found to be correct within the limits provided by law should be sealed in such a way that it will be impossible to open the portion of the meter containing the registering mechanism and adjust this mechanism without defacing the seal. In my opinion this requirement can only be met by a sealing wax seal so placed as to partly cover the seam between the top plate and the body of the meter, since the registering mechanism can be gotten at only by removing this top plate. Seals for this purpose have been designed and made under the approval of Commissioner Maltbie and are now in use. Each seal bears a different number, and as a record is kept of the number of the seal used by each tester it is a simple matter to find out at any time by whom any meter was sealed.

From what precedes it will be seen that it will be necessary to seal not only all new meters but also all meters which have been given repairs that necessitate the removal of the top plate and the adjusting of the registering mechanism, even though these meters had been tested and sealed previous to such repairs.

In addition to the sealing wax seal the Massachusetts Commission of Gas and Electricity use a brass badge bearing a serial number which is attached to each meter when it is sealed for the first time. The object of this badge is to enable the record of the test of any meter to be easily found in the record of test books, something that would be difficult to do in the absence of such a badge. It seems probable, however, that the necessity for looking up such records would so seldom arise that the affixing of the serially numbered badges may be an unnecessary requirement. I would advise that these badges be not used until further investigation is made as to their practical value. In the meantime the meter test record book form has been drawn up to contain a column for these numbers, so that in case this system is adopted there will be a place in the records for entering the numbers.

PROBABLE NUMBER OF METERS TO BE HANDLED PER YEAR.

From information received from the gas companies doing business in the first district, I estimate that you will be called upon to test and seal each year about 66,000 new meters and 177,000 repaired meters, apart from the meters tested on applications from individual consumers. It is difficult to tell how many tests will have to be made on such applications since the number has varied very widely from year to year, but it is not probable that the maximum of about 6,000, reached in 1905, will be exceeded. Indeed, the number of meters tested on complaint in the thirteen months ending December 31, 1906, was only about 5,000, and it is probable that as soon as the gas consumers understand that the seal of the commission on a meter stands for an actual and careful test of its accuracy the number of applications for the official testing of individual meters will fall much below even the smaller amount. As bearing on this probability the Massachusetts figures are of interest and show that in 1902, out of a total of 42,688 meters tested 996 were tested on consumers' complaints, while in 1906, although the total had increased to 61,034 the number of tests on complaint had dropped to 424. It is therefore probable that for the first year or two the number of meters to be tested and sealed will not be over 250,000 per year, or an average of 833 per day, counting 300 working days in the year. There will, however, be times during the months from September to March when meters will have to be handled at a rate of possibly 1,200 per day, and correspondingly there will be times during the rest of the year when the rate may fall as low as 500 per day.

NUMBER OF METERS WHICH A MAN SHOULD TEST AND SEAL PER DAY OF EIGHT HOURS.

Working at a bench equipment with two provers, a good, active man should be able to test and seal nine three-light meters, or twelve five-light meters per hour, it being possible to do more of the five-light than of the three-light, because in both cases two cubic feet of air has to be passed through

the meter, and in the five-light it is passed at a rate of thirty cubic feet, while in the three-light it is passed at a rate of only eighteen cubic feet per hour. These figures are based upon giving each meter only one test, but when, on repaired meters especially, the first test comes out close to the limit of error allowed, a second test should be made to make it certain that the meter is inside of these limits, and on account of these second tests the number that can be counted upon per hour will not run over seven three-lights or ten five-lights. As these two sizes will make up over two-thirds of the meters tested, it can be taken that the average number of meters tested and sealed per day will be about seventy-five. On this basis it will be necessary to employ an average of from ten to eleven testers, and this number would have to be increased to sixteen at the time of greatest activity in the selling and repairing of meters.

This is the number of men that will be required for testing only, and in addition it will be necessary to provide for visiting the premises of the consumers making complaints for the purpose of obtaining the descriptions of the meters and tagging them for removal. The number of meters that can be located and tagged per man per day will depend so greatly upon the extent to which the individual locations are scattered over the territory that it is practically impossible to make any estimate of the number of men required for this work in advance of actual experience. If the applications for tests were to continue to come in at the rate which prevailed during 1906, of about 384 per month, or of fifteen per working day, it would seem as if at least two men would be required for this work.

The men assigned to this part of the work should be of a higher grade of intelligence and education than it is necessary to have in men who are to do nothing but test meters.

PLACE OF TESTING.

I would advise that all new meters purchased by gas companies in the district from meter companies whose factories are also located in the district be tested at these factories. It will be more economical to do this than to wait until the meters reach the companies and test them at their shops, because in the case of the small companies located on the outskirts of the district the meters will be purchased in comparatively small lots, and the time occupied by a tester in going to and coming from the companies' shops will be a very large proportion of the total time occupied in actually testing the meters. On the other hand, the meter factories are located in the centre of the district and the testers can be expected to reach these factories in their own time, and in addition will be able to test the meters in larger batches and so be able to average more for a given length of working time than if they are tested at the companies' shops. There should be no difficulty in identifying the meters which are to be used in the district, and therefore no danger of testing and sealing meters which are not going to be used in the territory covered by you. As far as I am able to learn the only meter factories in the district are as follows:

METER FACTORIES IN DISTRICT AND PROBABLE REQUIREMENTS AT EACH FACTORY.

American Meter Company, Eleventh avenue and Forty-seventh street.

New York Improved Meter Company, No. 306 East Forty-seventh street.

United States Meter Company, No. 229 Chestnut street, Brooklyn.

I have not found that the last named factory is selling any meters in the district.

The largest factory is that of the American Meter Company, and its manager tells me that at the busy time of the year they will sell to companies in the district at the rate of 8,000 meters per month, although it is not probable that they will sell altogether more than from 50,000 to 55,000 new meters per year to companies in the district, or an average of about 170 to 185 per day.

The manager of the New York Improved Meter Company was not very definite as to the number of meters that they put out in the district but put his lowest sales as being about 5,000 per year. As the company's estimates show only about 66,000 new meters purchased per year, it is not probable that this factory will run over 10,000 to 15,000 meters per year, or an average of between 30 and 50 per day.

On the basis of the figures given above it will, therefore, probably be necessary to keep two testers at the factory of the American Meter Company all the time and increase this number up to four at the time of greatest activity, while it will not be necessary to have a man stationed at the New York Improved Meter Company's factory all the time, although at times it may be necessary to place two men there.

TESTING OF REPAIRED METERS.

The meters which have been repaired to such an extent as to require retesting and resealing can be best tested at the shops of those companies who do their own repairing, or who have repairing done outside of the district, and at the factories when the companies who do not do their own repairing have it done by the factories in the district.

The companies who do their own repairing are as follows:

Consolidated Gas Company, which has one large shop at the corner of First avenue and Twenty-first street, where repairs are made not only to its own meters but also to those of the New York Mutual Gas Light Company. According to the information furnished by the superintendent of shops of the Consolidated Gas Company there are repaired at this shop, to an extent requiring retesting and resealing, meters to the number of 100,000 per year, or an average of about 330 per day.

Standard Gas Light Company, the meter shop of which is on Ninety-first street east of First avenue. The number of meters repaired at this shop and which it would be necessary to retest and reseal, was stated to be about 12,500 per year, or an average of about 41 per day.

New Amsterdam Gas Company, the shop of which is on Forty-second street east of First avenue. At this shop it was stated that the number of meters repaired and which would require retesting and resealing was about 13,000 per year, or an average of about 44 per day.

Central Union Gas Company, the shop of which is at the corner of Alexander avenue and One Hundred and Forty-second street, borough of the

Bronx. This company repairs not only its own meters but also those of the Northern Union Gas Company, and of the Westchester Lighting Company, only part of the territory supplied by the latter company being in the first district. The company informed me that the number of meters belonging in the first district which were repaired at this shop and would require retesting and resealing would be about 13,000 per year, or an average of about 44 per day.

The Brooklyn Union Gas Company, which has two meter repair shops, one being on Atlantic avenue and the other at the corner of Bedford avenue and South Second street, both in Brooklyn. The total number of meters repaired by the company during a year was stated to be about 35,000, or about 117 per day, of which two-thirds are handled at the Atlantic avenue shop and the remaining one third at the Bedford avenue shop. The Brooklyn Union Company also repairs the meters belonging to its subsidiary companies, viz., the Flatbush Gas Company, the Jamaica Gas Light Company, the Newtown Gas Light Company and the Richmond Hill and Queens Gas Company, and the meters of these companies are included in the total given above.

Kings County Lighting Company, which has its meter repair shop at its works at Fifty-fifth street and First avenue, Brooklyn, and which repairs, in such a way as to require retesting and resealing, 600 meters per year, or an average of only 2 per day.

The Brooklyn Borough Gas Company, which has a repair shop at its works on Sheepshead Bay, Coney Island, and which repairs, in such a way as to require retesting and resealing, about 500 meters per year, or less than 2 per day.

Queens Borough Gas and Electric Company at Far Rockaway, which repairs at its own shop an average of 4 meters a day, and has, in addition to this, about 100 meters per year repaired at the meter factories.

The New York and Richmond Gas Company, which has its office at Stapleton, and its works at Clifton, Staten Island, and which repairs at its own works about 700 meters and has repaired at the meter factories within the district about 600 meters per year.

The companies which at present do not repair their own meters, but have them repaired at the meter factories within the first district, are:

The Bronx Gas and Electric Company, Westchester, and the New York and Queens Gas Company, at Flushing.

From the figures given for the companies which repair their own meters it will be seen that it will be necessary to keep an average of between four and five men at the shop of the Consolidated Gas Company, and that almost the full time of two men will be required by the Brooklyn Union Company, while the Standard New Amsterdam and Central Union companies will, between them, come close to requiring the services of two more. The number of meters repaired per day by the other companies is so small that their requirements during the course of a year will not amount altogether to more than about forty days for one man.

TESTING OF COMPLAINT METERS.

The complaint meters, that is, those which are tested because of doubt in the mind of the consumers in regard to their accuracy, will, in every case, have to be tested at the shop of the company to which the meter be-

longs. The present custom with the Brooklyn Union Company is to have all these complaint meters tested at the office of the branch in the territory to which the consumer belongs, and it is possible that this method may prove as convenient as that of having all the complaint meters sent to one or the other of the two meter repair shops, but this is a question which will have to be decided as a matter of experience.

It may also be found, after further experience, that it will be more convenient both for the companies and the Commission, to have the complaint meters from the small companies operating in the more distant parts of the district sent to a central testing place, such as that at the factory of the American Meter Company, or that at the shop of the Consolidated Gas Company. In case this method of handling complaint meters for the small companies is adopted the consumer should be made to pay the cost of sending the meter to this central testing place and of returning it to the shop of the company in addition to the regular fee charged for the State inspection. This is done in Massachusetts, where practically all of the complaint meters from different parts of the State are sent to Boston to be tested.

METHOD OF HANDLING APPLICATIONS FROM CONSUMERS FOR METER TESTS.

I would advise that applications for the testing of meters by consumers be handled as follows: When the application is made in person the clerk shall fill out the application blank, form "A" (copy of all the forms mentioned is appended to this report), and have it signed. When the application is made by letter the application blank need not be filled out, the letter serving as the written application required by law.

The application having been properly signed, or having been received by letter, the clerk shall take a card (form "B"), which cards shall be numbered serially with the application number and used in order of these numbers, and enter upon it the date, the name and address of the person making the application, and the name of the gas company supplying the premises and the amount of the fee, if the size of the meter is known, and if the fee is paid indicate it by entering the date in the proper space and give the proper receipt for it. When this data has been entered the clerk shall turn the card over to the chief inspector.

The chief inspector will assign the application to one of his subordinates, entering the name of the person to whom this assignment is made in the proper place.

After the assignment to the proper inspector has been entered, the clerk shall separate the two parts of form "B," file the duplicate in the proper place in order of the application number and turn the original over to the chief inspector.

If the application is in writing the clerk shall also fill out and mail to the consumer form "L" as a notification that the application will be attended to.

All the applications assigned to any one inspector shall be turned over to him at the end of each day.

The inspector to whom an application is assigned shall take form "B" and proceed to the premises designated on this form. On arrival there he shall collect the fee, if it has not been paid, entering on form "B" the

payment of this fee and giving the proper receipt for it, and shall locate the meter and enter upon form "B" its description. He shall then fill out form "C," detach the white original sheet from the tag and attach the tag to the meter, entering the date in the proper place on form "B" as an indication that the meter has been tagged. At the end of the day he shall send into the office all the copies of form "B" and all the white sheets of form "C" for the meters that he has attended to.

When they reach the office the clerk shall send the white sheets of form "C" to the proper gas companies to constitute the removal orders for the meters, shall enter upon the cards, form "B," in the proper place, the date upon which these orders have been sent, and shall then send the cards to the proper testing stations as a notification that the meters described on them are to be received and tested.

Upon receiving form "B" at the testing station the tester shall look out for the arrival of the meter described on this form, and, when it is received, shall enter in the proper place the date of its receipt. He shall then test the meter, after allowing it to remain in the station not less than five (5) hours in order that the temperatures may be equalized, within twenty-four hours after its receipt, unless the consumer desires to be present at the test and it cannot be arranged to secure his presence within this time limit. After the test has been made the tester shall enter upon form "B" the cubic feet passed by the meter and by the prover, and the percentage, fast or slow, shown by the test. He shall also fill out form "D" and paste it upon the meter. At the end of each day he shall send into the office all the copies of form "B" upon which he has recorded the results of tests during the day.

When the card is returned from the testing station the record clerk shall send formal notice of the result of the test to the gas company, using for this purpose form "E," and shall also send formal notice of the result of the test to the consumer, using form "F" if the meter is correct or slow, and form "G" if the meter is fast. After filling out these notices he shall enter upon form "B" the date on which they are sent.

If the meter is fast and the fee deposited for the test is returned to the consumer the record clerk shall enter upon form "B" the date on which this fee was returned.

He shall also enter upon form "B" the date upon which the fee for a fast meter is paid by the gas company. In the case of a meter which is correct, or slow, the two last entries do not have to be made.

When form "B" has been entirely filled out it shall be filed in the proper place alphabetically by the name of the consumer, and the duplicate which has been held up to this time as a check upon the completion of the work shall be destroyed, or, if the original shall have become too soiled, the information on the original may be transferred to the duplicate and the latter filed, while the original is destroyed.

METHOD OF HANDLING APPLICATIONS FROM GAS COMPANIES FOR METER TESTS.

In many cases an agreement to have a meter tested officially is made between the gas company and the consumer affected, and the securing of the test is left to the gas company. In such cases the application for the

test should be made upon form "J" and a description of the meter given upon this application. There is no reason why the meters covered by these applications should be tagged by a State Inspector, since, if there is any suspicion that the proper meter is not produced for test, this suspicion can be easily proved or disproved by an examination of the company's records, which will always contain a description of the meter set on the premises of each consumer. In fact, the Gas and Electric Commission of Massachusetts does not tag any of the meters which it tests on complaint, not even those located in Boston, which form by far the largest number of complaint meters tested by them, but depend entirely upon the ability to check the identity of the meter from the records of the company in case any suspicion arises.

A card, form "B," should, however, be filled out and all the entries except those in regard to payment of fee, assignment to inspector, and date of tagging, made as in the case of an application by a consumer before the duplicate is sent to the testing place. In addition, the fact that the application has been made by the company should be noted on the back of the card, as this fact will govern the notices to be sent out after the test. The original shall be kept in the office as a check upon the making of the test, as in the case of an application made by a consumer.

After the test has been made notices shall be sent to the consumer and to the gas company, but these notices, from the nature of the case, will differ slightly from those sent when the test has been made upon application of the consumer, and will be as per forms "M" and "N."

The gas companies shall be billed monthly for the fees for all the meters tested upon their applications, and also for those tested upon consumers' applications which have proved to be fast and the fee for which has, therefore, been returned to the consumer.

RECORD OF ALL METER TESTS.

Each meter tester shall be provided with a gas meter test record book, ruled and printed according to the form which has already been handed in. In this book he shall enter in the proper columns the description of each meter tested and the record of the test, including the state of the index, the number of cubic feet of gas passed by the meter and by the prover, the percentage of error of the meter and whether fast or slow, the temperature of the water in the prover and the air in the testing room, and the pressure at which the test is made. He shall also enter any remarks that are called for by the test. These entries in the test record book shall be made for complaint meters in addition to the similar entries on form "B." Each page of this book shall be signed by the meter tester making the tests recorded on it.

These books have been made up so that all of these entries will be made both on an original and on a duplicate sheet, and the duplicates are to be detached from the book and sent to the office of the Bureau of Gas and Electricity daily. At this office they will be filed in any suitable form of binder, the tests made by each man being kept all together.

RECORD OF WORK DONE BY EACH GAS METER TESTER.

From the gas meter test record sheets the number of meters of each size tested by each meter tester shall be made up for each day and entered upon a card 5" x 8," which shall be headed:

RECORD OF WORK DONE BY GAS METER TESTERS.

Month of 19

Name.....

and ruled so as to have a separate vertical column for the date and for each of the standard sizes of gas meters up to 300 lights. This card will have spaces for the entry of the work done on twenty-seven different days each month with a space at the bottom for the total for the month. A properly ruled form for this card is handed in with this report.

By means of these cards a complete record of the amount of work done by each meter tester will be available and it will be very easy to see from them just which of the men, if any, are not doing a full day's work.

SUMMARY OF GAS METER TESTS.

For the purpose of keeping a summary of the meter tests so as to make it possible to know just how much work has been done at the end of each month, there should be made up books so ruled as to show a summary of all the gas meter tests made on each day. There will be two of these books, one of which will contain on each double page the record for a month of all the new meters and all the repaired meters tested during that month, these meters being divided by sizes into two classes, "O. K.," and "Needing Adjusting," the latter being the meters that have been found to be in error to a greater extent than the limits allowed by law and which have therefore been turned back to either the maker or the gas company for adjustment and retest. A form of ruling for this book is handed in with this report.

The second book will be so ruled as to show on each double page the summary of the complaint meters tested in any one month, the meters being separated by sizes and there being given under each size the number found to be correct, fast and slow, and the total percentage fast and slow. There are also columns giving the total number O. K., fast and slow and the grand total percentage fast and slow, and in addition columns in which are to be entered the number and sizes of the meters which do not register or do not pass gas, the number fast or slow between definite percentage limits and the maximum percentage of error fast and slow shown in any test during the month, with the size of the meter showing these errors.

These summary books, which will be kept in the office of the Bureau of Gas and Electricity, the proper figures being prepared from the reports sent in by the different meter testers, and entered daily, will provide at any time all the information in regard to the results of the meter testing that experience shows it is advisable to have.

In my opinion the various forms and books which have been described above are all that will be required for the handling of complaint gas meter tests and the recording of the tests of such meters as well as those made of new and repaired meters.

In addition to the "Instructions for Meter Testers" and the copies of the various forms and books which have been mentioned above, there are also appended to this report "Instructions for the Handling of Applications for Tests by Consumers," divided into instructions as to the work done by each person through whose hands the application, or the meter covered by it, has to pass.

Respectfully submitted,
(Signed) ALFRED E. FORSTALL.

APPENDIX F.

REPORT OF THE AUDITOR.

APPENDIX F.

REPORT OF THE AUDITOR.

For the six months ending June 30, 1907.

PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT, NEW YORK.

Auditor's Office, *December* 31, 1907.

The Honorable Public Service Commissioners for the First District, New York:

GENTLEMEN — I have the honor to submit herewith my report as Auditor, in relation to the finances and accounts of the Board of Rapid Transit Railroad Commissioners, for the period, January 1, 1907, to June 30, 1907, giving in general and in detail, the following:

I. REQUISITIONS FOR THE GENERAL FUND: (Folio 340.) A statement showing the Requisitions made upon the Board of Estimate and Apportionment for the authorization for the issue of Revenue Bonds for the requirements of the Board of Rapid Transit Railroad Commissioners, from January 1, 1907, to June 30, 1907.

II. APPROPRIATIONS FOR THE GENERAL FUND: (Folio 341.) A statement showing the Appropriations made by the Board of Estimate and Apportionment for the purposes of the Board of Rapid Transit Railroad Commissioners, from January 1, 1907, to June 30, 1907.

III. DISBURSEMENTS FROM THE GENERAL FUND: Statements showing the Disbursements from the General Fund made under the direction of the Rapid Transit Board, from January 1, 1907, to June 30, 1907, viz.:

a. Administrative and General Office. (Folio 342.)
b. Engineering. (Folio 342.)
c. Legal. (Folio 343.)

IV. REQUISITIONS AND APPROPRIATIONS FOR THE MANHATTAN-THE BRONX CONSTRUCTION FUND. (Folio 344.) A statement showing the Requisitions made upon the Board of Estimate and Apportionment for the authorization for the issue of Corporate Stock of The City of New York, and the appropriations made by the Board of Estimate and Apportionment, the proceeds thereof to be applied to the requirements of the Manhattan-The Bronx Construction Fund, under

provision of the contract with *John B. McDonald, Contractor*, dated February 21, 1900, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Manhattan-The Bronx Rapid Transit Railroad, from January 1, 1907, to June 30, 1907.

V. DISBURSEMENTS FOR EXTRA WORK DONE AND MATERIALS FURNISHED. MANHATTAN-THE BRONX CONSTRUCTION: (Folio 345.) A statement showing the requisitions made upon the Board of Rapid Transit Railroad Commissioners, and the payments authorized under the direction of the said Rapid Transit Board, to be made to *John B. McDonald, Contractor*, for Extra Work done and materials furnished under contract dated February 21, 1900, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Manhattan-The Bronx Rapid Transit Railroad from January 1, 1907, to June 30, 1907.

VI. DISBURSEMENTS FOR REAL ESTATE. MANHATTAN-THE BRONX CONSTRUCTION: (Folios 346, 347.) A statement showing the payments authorized under the direction of the Board of Rapid Transit Railroad Commissioners to be made for Real Estate acquired for and in behalf of The City of New York, under provision of the contract with *John B. McDonald, Contractor*, dated February 21, 1900, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Manhattan-The Bronx Rapid Transit Railroad, from January 1, 1907, to June 30, 1907.

VII. CORPORATE STOCK ISSUES OF THE CITY OF NEW YORK. BROOKLYN-MANHATTAN CONSTRUCTION: (Folio 348.) A statement showing the issues of Corporate Stock of The City of New York, from January 1, 1907, to June 30, 1907, the proceeds thereof to be applied to the construction of the Brooklyn-Manhattan Rapid Transit Railroad.

VIII. DISBURSEMENTS FOR WORK DONE AND MATERIALS FURNISHED. BROOKLYN-MANHATTAN CONSTRUCTION: (Folio 349.) A statement showing the requisitions made upon the Board of Rapid Transit Railroad Commissioners, and the payments authorized under the direction of the Rapid Transit Board, to be made to *Rapid Transit Subway Construction Company, Contractor*, for work done and materials furnished under contract dated July 21, 1902, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad from January 1, 1907, to June 30, 1907.

IX. DISBURSEMENTS FOR EXTRA WORK DONE AND MATERIALS FURNISHED BROOKLYN-MANHATTAN CONSTRUCTION: (Folio 350.) A statement showing the requisitions made upon the Board of Rapid Transit Railroad Commissioners, and the payments authorized under the direction of the said Rapid Transit Board, to be made to *Rapid*

Transit Subway Construction Company, Contractor, for Extra Work done and materials furnished under contract dated July 21, 1902, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad, from January 1, 1907, to June 30, 1907.

X. DISBURSEMENTS FOR REAL ESTATE. BROOKLYN-MANHATTAN CONSTRUCTION: (Folio 351.) A statement showing the payments authorized under the direction of the Board of Rapid Transit Railroad Commissioners, to be made for Real Estate acquired for and in behalf of The City of New York, under provision of the contract with *Rapid Transit Subway Construction Company, Contractor*, dated July 21, 1902, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad, from January 1, 1907, to June 30, 1907.

XI. PAYMENT OF INTEREST ON THE CORPORATE STOCK ISSUED. BROOKLYN-MANHATTAN CONSTRUCTION: (Folio 352.) A statement showing the payments made under the direction of the City Comptroller for Interest due on the Corporate Stock issued by The City of New York, for the construction of the Brooklyn-Manhattan Rapid Transit Railroad, from January 1, 1907, to June 30, 1907.

XII. REQUISITIONS AND APPROPRIATIONS FOR THE BROOKLYN-MANHATTAN LOOP LINES (MANHATTAN SECTIONS) CONSTRUCTION FUNDS. (Folios 353, 354.) A statement showing the Requisitions made upon the Board of Estimate and Apportionment for the authorization for the issue of Corporate Stock of The City of New York, and the appropriations made by the Board of Estimate and Apportionment, the proceeds thereof to be applied to the requirements of the Brooklyn-Manhattan Loop Lines (Manhattan Sections) Construction Funds, under the provision of the various contracts for the construction of the Manhattan sections Nos. 9-0-1, 9-0-2, 9-0-3, 9-0-4, and 9-0-5 of the Brooklyn-Manhattan Loop Lines, from January 1, 1907, to June 30, 1907.

XIII. BALANCES OF THE FUND ACCOUNTS: Statements showing the yearly balances of the various funds, viz.:

a. General Fund. (Folio 355.)
b. Manhattan-The Bronx Construction Fund. (Folio 356.)
c. Brooklyn-Manhattan Construction Fund. (Folio 357.)

XIV. SECURITY: Statements relative to the securities deposited under the provisions of the various contracts for Railroad Construction and operation.

a. Manhattan-The Bronx Contract. (Folio 358.)
b. Brooklyn-Manhattan Contract. (Folio 358.)
c. Brooklyn-Manhattan Loop Lines (Manhattan Sections) Contracts. (Folios 359. 360.)

XV. RENTAL: Statements showing the rental received by the City Comptroller under leases by The City of New York of the following Railroads, viz.:

a. Manhattan-The Bronx Rapid Transit Railroad. (Folio 361.)

b. Brooklyn-Manhattan Rapid Transit Railroad. (Folio 362.)

XVI. A Recapitulation of the following, viz.:

a. General Fund Requisitions and Appropriations, 1894 to 1907 inclusive. (Folio 363.)

b. General Fund Disbursements, 1894 to 1907, inclusive. (Folio 364.)

c. Manhattan-The Bronx Construction Fund Requisitions and Appropriations, 1894 to 1907 inclusive. (Folio 365.)

d. Brooklyn-Manhattan Construction Fund Requisitions and Appropriations, 1894 to 1907 inclusive. (Folio 366.)

e. Brooklyn-Manhattan Loop Lines (Manhattan Sections) Construction Funds Requisitions and Appropriations in the year 1907. (Folio 367.)

f. Corporate Stock issued by The City of New York for Railroad Construction, 1894 to 1907, inclusive, viz.:

I. Manhattan-The Bronx Construction Fund. (Folio 368.)

II. Brooklyn-Manhattan Construction Fund. (Folios 368, 369.)

g. Construction Fund Disbursements, 1894 to 1907 inclusive, viz.:

a. Manhattan-The Bronx Construction. (Folio 370.)

b. Brooklyn-Manhattan Construction. (Folio 370.)

h. A Summary of all Disbursements. (Folio 371.)

GENERAL FUND.

I. REQUISITIONS.

Statement of Requisitions made upon the Board of Estimate and Apportionment for the issue of Revenue Bonds for the requirements of the Board of Rapid Transit Railroad Commissioners from January 1, 1907, to June 30, 1907.

December 27, 1906. As stated on page 4,549 of the minutes of the Rapid Transit Commission	$826,500 00
March 14, 1907. As stated on page 4,788 of the minutes of the Rapid Transit Commission	26,667 00
Total amount of Requisitions made upon the Board of Estimate and Apportionment for the requirements of the Board of Rapid Transit Railroad Commissioners, from January 1, 1907, to June 30, 1907	$853,167 00

GENERAL FUND.

II. APPROPRIATIONS.

Statement showing the Appropriations made by the Board of Estimate and Apportionment for the purposes of the Board of Rapid Transit Railroad Commissioners, from January 1, 1907, to June 30, 1907.

DATE.	Issue of revenue bonds.	Proceeds deposited in the city treasury.		Total.
January 25, 1907, as stated on page 305 of the minutes of the Board of Estimate and Apportionment.	4½% bonds redeemable 1908	January 31, 1907	$50,000 00	
	4½% bonds redeemable 1908	February 18, 1907	71,836 00	
	4% bonds redeemable 1908	March 7, 1907	15,000 00	
	4½% bonds redeemable 1908	March 25, 1907	10,000 00	
	4% bonds redeemable 1908	April 9, 1907	1,000 00	
	4½% bonds redeemable 1908	April 9, 1907	19,000 00	
	4½% bonds redeemable 1908	April 17, 1907	25,000 00	
	4½% bonds redeemable 1908	April 18, 1907	40,000 00	
	4½% bonds redeemable 1908	April 26, 1907	15,000 00	
	4½% bonds redeemable 1908	May 1, 1907	15,000 00	
	4½% bonds redeemable 1908	May 20, 1907	19,000 00	
	4½% bonds redeemable 1908	May 20, 1907	41,000 00	
	4½% bonds redeemable 1908	June 13, 1907	15,000 00	
	4½% bonds redeemable 1908	June 25, 1907	40,000 00	$376,836 00
Amount of appropriations made by the Board of Estimate and Apportionment, applied to the purposes of the Board of Rapid Transit Railroad Commissioners, from January 1, 1907 to June 30, 1907				$376,836 00

GENERAL FUND.

III. DISBURSEMENTS.

Statement showing the amount of Disbursements made under the direction of the Board of Rapid Transit Railroad Commissioners from January 1, 1907, to June 30, 1907.

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a. ADMINISTRATIVE AND GENERAL OFFICE.

Compensation of Commissioners	$26,667 00
Salaries	4,369 98
Office and telephone rentals	1,163 43
Stationery, printing and supplies	7,273 47
Postage	46 00
Emergency work in connection with ventilation of Manhattan-The Bronx Railroad	28,738 49
Emergency work in connection with ventilation of Brooklyn-Manhattan Railroad	403 24
Additional work, resetting monument in Battery Park	75 00
Sundry contingent expenses	61 78
Total amount of administrative and general office disbursements	$68,798 39

b. ENGINEERING.

Salaries	$266,745 40
Office and telephone rentals	9,964 11
Stationery, printing and supplies	7,803 16
Furniture	435 57
Telegraph service	43 40
Lighting	41 23
Janitor service	306 00
Engineering instruments and supplies	3,369 22
Maps, plans, prints, and photographic supplies	2,044 64
Disbursements (traveling expenses, etc.)	1,984 34
Inspections, tests, and analysis	668 22
Borings and soundings	336 00
Architectural services and disbursements	2,650 22
Consulting electrical engineer's services	625 00
Consulting sanitary expert, services and disbursements	1,000 00
Consulting refrigerating expert, services, etc	1,099 44
Surveying	75 00
Sundry contingent expenses	1,054 04
Total amount of engineering disbursements	$300,244 99

c. LEGAL.

ADVERTISING.

Advertising notices of public hearings, and invitations to contractors, for proposals to construct proposed additional subway lines in the boroughs of Manhattan and The Bronx, Brooklyn and Queens, New York City	$24,087 00

EXPERT SERVICE.

Professional services rendered by consulting engineers as expert witnesses, before the commission appointed to determine the construction of the railroad through William street, New York City	5,000 00

CLERICAL SERVICES.

Stenographic services rendered to the commissioners appointed by the Appellate Division of the Supreme Court, in and for the First Judicial District, to determine whether the Brooklyn and Manhattan Loop Lines (Manhattan Sections) ought to be constructed and operated	4,027 25

REAL ESTATE SEARCH, ETC.

Fees for special information and searches relative to various properties along the routes of proposed additional subway lines in the Boroughs of Manhattan and The Bronx, Brooklyn, and Queens, New York City	10,967 50

SPECIAL COMMISSIONS.

Compensation for Commissioners appointed by the Appellate Division of the Supreme Court, in and for the First and Second Judicial Districts, to determine whether certain proposed additional subway lines ought to be constructed and operated in the Boroughs of Manhattan and The Bronx, Brooklyn, and Queens, New York City	21,017 48
Compensation and expenses of the referee appointed by the Appellate Division of the Supreme Court, in and for the First Judicial District, in the matter of the modification of the Park avenue section, Manhattan-The Bronx Rapid Transit railroad	7,097 70

COUNSEL.

Fees	$10,000 00	
Disbursements	3,974 92	
Special counsel fees and disbursements	5,519 32	
		19,494 24
Total amount of legal disbursements		$91,691 17

MANHATTAN-THE BRONX CONSTRUCTION FUND.

IV. REQUISITIONS AND APPROPRIATIONS.

Statement of Requisitions made upon the Board of Estimate and Apportionment, for the authorization for the issue of Corporate Stock of The City of New York and the Appropriations made by the Board of Estimate and Apportionment, the proceeds thereof to be applied to the requirements of the Manhattan-The Bronx Construction Fund under provision of the contract with *John B. McDonald, Contractor*, dated February 21, 1900, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Manhattan-The Bronx Rapid Transit Railroad, from January 1, 1907, to June 30, 1907.

No.	Authorized.	Amount.	Appropriation.	Amount.
7.	February 14, 1907. As stated on page 4735 of the minutes of the Rapid Transit Board, viz.: Extra work — Changes in the Rapid Transit railway station at One Hundred Forty-ninth street and Third avenue in the borough of the Bronx	$15,000 00	February 15, 1907. As stated on page 614 of the minutes of the Board of Estimate and Apportionment	$15,000 00
8.	June 13, 1907. As stated on page 4093 of the minutes of the Rapid Transit Board, viz.: For interest on corporate stock	729,773 63	June 28, 1907. As stated on page 2479 of the minutes of the Board of Estimate and Apportionment	729,773 63
	Total amount of requisitions made upon the Board of Estimate and Apportionment for the requirements of the Board of Rapid Transit Railroad Commissioners in the construction of the Manhattan-The Bronx Rapid Transit Railroad, from January 1, 1907, to June 30, 1907	$744,773 63	Total amount of appropriations made by the Board of Estimate and Apportionment, the proceeds to be applied to the construction of the Manhattan-The Bronx Rapid Transit Railroad, from January 1, 1907, to June 30, 1907	$744,773 63

MANHATTAN-THE BRONX CONSTRUCTION FUND.

DISBURSEMENTS.

V. EXTRA WORK.

Statement showing the Requisitions made upon the Board of Rapid Transit Railroad Commissioners, and the payments authorized under the direction of the Rapid Transit Board to be made to *John B. McDonald, Contractor*, for extra work done and materials furnished under contract dated February 21, 1900, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Manhattan–The Bronx Rapid Transit Railroad of The City of New York, from January 1, 1907, to June 30, 1907.

REQUISITION.	To date.	Payments authorized.			To whom.	Amount.
	1906.	1907.				
Outlet chambers	August 31	February	14	As stated on page 4737 of the minutes of the Rapid Transit Commission	John B. McDonald, contractor.	$299,094 96
Cooling plant at Brooklyn Bridge station	November 7	February	20	As stated on page 4751 of said minutes.	John B. McDonald, contractor.	14,505 00
Van Cortlandt Park extension..	1907.					
1	February 28	April	4	As stated on page 4804 of said minutes.	John B. McDonald, contractor.	288,032 75
2	March 30	April	11	As stated on page 4824 of said minutes.	John B. McDonald, contractor.	6,003 25
3	April 30	May	16	As stated on page 4923 of said minutes.	John B. McDonald, contractor.	16,116 00
4	May 31	June	13	As stated on page 4980 of said minutes.	John B. McDonald, contractor.	135,460 00
Total amount paid to *John B. McDonald, contractor*, for extra work done and materials furnished under contract dated February 21, 1900, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Manhattan-The Bronx Rapid Transit Railroad from January 1, 1907 to June 30, 1907						$759,211 96

DISBURSEMENTS — *Continued.*

VI. REAL ESTATE.

Statement showing the Requisitions made upon the Board of Rapid Transit Railroad Commissioners, and the payments authorized under the direction of the Rapid Transit Board, to be made for Real Estate acquired, for and in behalf of The City of New York, under provision of the contract with *John B. McDonald, Contractor,* dated February 21, 1900, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Manhattan-The Bronx Rapid Transit Railroad, from January 1, 1907, to June 30, 1907.

DISBURSEMENTS.	Amount.	Total.
ADVERTISING.		
Advertising notices in the matter of the application and petition of the Board of Rapid Transit Railroad Commissioners for the appointment of commissioners of appraisal by the Appellate Division of the Supreme Court, First Judicial District, relative to lands situated, viz.:		
Easements — On Westchester avenue, Southern boulevard, and Boston road, in the Borough of The Bronx, New York city (application for the appointment of commissioner in the place and stead of one previously appointed, who resigned)	.....	$140 00
CLERICAL SERVICE.		
Compensation of the clerk of the commissioners of appraisal appointed by the Appellate Division of the Supreme Court, First Judicial District, relative to lands situated, viz.:		
Easements — On Westchester avenue, Southern boulevard, and Boston road, in the Borough of The Bronx, New York city	$601 58	.....
The city of New York — Reimbursement of a fund for expenses of commissioners of estimate and appraisal, for clerks, etc.; services rendered the commissioners of appraisal appointed by the Appellate Division of the Supreme Court, First Judicial District, relative to lands situated, viz.:		
Easements — On the westerly side of Fourth avenue, between Eighth and Ninth streets, in the Borough of Manhattan, New York city	68 16	.....
Stenographic services rendered the commissioners of appraisal appointed by the Appellate Division of the Supreme Court, First Judicial District, relative to lands situated, viz.:		
Easements — On Westchester avenue, Southern boulevard and Boston road, in the Borough of The Bronx, New York city	787 60	
		1,457 34
REAL ESTATE SEARCH AND APPRAISAL.		
Fees for examining and insuring titles to various properties situated, viz.:		
Easements — On Westchester avenue, Southern boulevard, Boston road, and on Tenth avenue, in the Boroughs of Manhattan and The Bronx, New York city	$3,481 50	
Easements — Northeast corner of One Hundred and Forty-third street and Lenox avenue, Borough of Manhattan, New York city	75 00	
Easements — Southeast corner of One Hundred and Forty-third street and Lenox avenue, Borough of Manhattan, New York city	75 00	
Easements — Southerly side of One Hundred and Forty-fifth street, east of Lenox avenue, Borough of Manhattan, New York city	75 00	
Easements — Southwest corner of One Hundred and Forty-ninth street and River avenue, Borough of The Bronx, New York city	75 00	
Easements — Premises No. 2708 Broadway, Borough of Manhattan, New York city	100 00	
Easements — Premises Nos. 212-230 West One Hundred and Fourth street, Borough of Manhattan, New York city	100 00	
Easements — Lands at One Hundred and Eightieth street and Boston road, Borough of The Bronx, New York city.	233 23	
Carried forward	$4,214 73	$1,597 34

DISBURSEMENTS — *Continued.*

REAL ESTATE — *Continued.*

DISBURSEMENTS.	Amount.	Total.
REAL ESTATE SEARCH AND APPRAISAL—*Continued.*		
Brought forward	$4,214 73	$1,597 34
Estate in fee — Hillside avenue near Ellwood street, Borough of Manhattan, New York city (additional fee)	15 00	
Estate in fee — At Worth and Elm streets, Borough of Manhattan, New York city	100 00	
Estate in fee — At Hillside and Eleventh avenues, Borough of Manhattan, New York city	75 00	
Estate in fee — Fees for services in the appraisal of the property, viz.: At Hillside and Eleventh avenues, Borough of Manhattan, New York city	75 00	
		4,479 73
COMMISSIONERS OF APPRAISAL.		
Compensation for commissioners of appraisal appointed by the Appellate Division of the Supreme Court, First Judicial District, relative to lands situated, viz.:		
Easements — On the westerly side of Fourth avenue, between Eighth and Ninth streets, in the Borough of Manhattan, New York city	.....	4,200 00
REAL ESTATE.		
Easement properties on Naegle avenue, between Dyckman and West Two Hundred and Fifth streets, viz.: Payments made for the release and conveyance in perpetuity, pursuant to resolutions adopted by the Rapid Transit Board, of various easements appurtenant to the lands situated on Naegle avenue, between Dyckman and West Two Hundred and Fifth streets, in the Borough of Manhattan, New York city	1,500 00	
Easement properties on Tenth avenue, between West Two Hundred and Fifth and West Two Hundred and Sixteenth streets, viz.: Payments made for the release and conveyance in perpetuity, pursuant to resolutions adopted by the Rapid Transit Board, of various easements appurtenant to the lands situated on Tenth avenue, between West Two Hundred and Fifth and West Two Hundred and Sixteenth streets, in the Borough of Manhattan, New York city	1,249 17	
Easement properties on Broadway, between West Two Hundred and Sixteenth and West Two Hundred and Thirtieth streets, viz.: Payments made for the release and conveyance in perpetuity, pursuant to resolutions adopted by the Rapid Transit Board of various easements appurtenant to the lands situated on Broadway, between West Two Hundred and Sixteenth and West Two Hundred and Thirtieth streets, in the Borough of Manhattan, New York city	8,259 69	
Easement properties on Westchester avenue, between Third avenue and East One Hundred and Fiftieth street and the Southern boulevard and East One Hundred and Sixty-sixth street, viz.: Payments made for the release and conveyance in perpetuity, pursuant to resolutions adopted by the Rapid Transit Board, of various easements appurtenant to the lands situated on Westchester avenue, between Third avenue and East One Hundred and Fiftieth street and the Southern boulevard and East One Hundred and Sixty-sixth street, in the Borough of The Bronx, New York city	1,300 00	
Easement properties on Boston road, between the Southern boulevard and East One Hundred and Seventy-fourth street and East One Hundred and Eighty-first street, viz.: Payments made for the release and conveyance in perpetuity, pursuant to resolutions adopted by the Rapid Transit Board, of various easements appurtenant to the lands situated on Boston road, between the Southern boulevard and East One Hundred and Seventy-fourth street and East One Hundred and Eighty-first street, in the Borough of The Bronx, New York city	795 80	
		13,104 66
Total amount paid for real estate acquired under provision of the contract with John B. McDonald, contractor dated February 21, 1900, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Manhattan–The Bronx Rapid Transit Railroad, from January 1, 1907, to June 30, 1907	.....	$23,381 73

BROOKLYN-MANHATTAN CONSTRUCTION FUND.

VII. CORPORATE STOCK.

Statement showing the issue of Corporate Stock of The City of New York, from January 1, 1907, to June 30, 1907, the proceeds thereof to be applied to the construction of the Brooklyn-Manhattan Rapid Transit Railroad.

NUMBER.	Date of sale.	Issue.	Interest, rate.	Maturity.	ISSUE OF STOCK.						
					Date.	Rate of premium.	Amount issued.	Total.	Amount of premium.	Total.	Amount of proceeds credited.
*11	1907. April 22	$30,000 00	4%	1957. May 1	1907. April 22	.....	$30,000 00	$30,000 00	.....	.....	$30,000 00
*12	May 7	6,000 00	4%	May 1	May 7	.....	$6,000 00	6,000 00	.....	.....	6,000 00
Total amount of corporate stock issued								$36,000 00			
Total amount of premium on the issue of corporate stock										$36,000 00	
Total amount of proceeds applicable to the construction of the Brooklyn-Manhattan Rapid Transit Railroad of the city of New York, from January 1, 1907 to June 30, 1907											$36,000 00

*Issues of bonds sold at par value to the commissioners of the sinking fund.

BROOKLYN-MANHATTAN CONSTRUCTION FUND.

VIII. DISBURSEMENTS.

Statement showing the Requisitions made upon the Board of Rapid Transit Railroad Commissioners, and the payments authorized under the direction of the Rapid Transit Board, to be made to *Rapid Transit Subway Construction Company, Contractor*, for work done and materials furnished under contract dated July 21, 1902, and the agreements amendatory thereof and supplementary thereto, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad of The City of New York, from January 1, 1907, to June 30, 1907.

Requisition.	To date.		Payments authorized.	To whom.	Amount.
40	1907. To January 31	1907. February 20	As stated on page 4740 of the minutes of the Rapid Transit Commission	Rapid Transit Subway Construction Co.	$24,896 87
41	February 28	March 25	As stated on page 4794 of said minutes	Rapid Transit Subway Construction Co.	21,701 20
42	March 31	April 18	As stated on page 4842 of said minutes	Rapid Transit Subway Construction Co.	8,700 95
43	April 30	May 16	As stated on page 4924 of said minutes	Rapid Transit Subway Construction Co.	11,989 20
44	May 31	June 27	As stated on page 5018 of said minutes	Rapid Transit Subway Construction Co.	12,769 80
Total amount paid to Rapid Transit Subway Construction Company, for work done and materials furnished under contract dated July 21, 1902, and the agreements amendatory thereof and supplemental thereto for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad, from January 1, 1907, to June 30, 1907					$80,058 02

DISBURSEMENTS — *Continued.*

IX. EXTRA WORK.

Statement showing the Requisitions made upon the Board of Rapid Transit Railroad Commissioners, and the payments authorized under the direction of the Rapid Transit Board to be made to *Rapid Transit Subway Construction Company, Contractor*, for extra work done and materials furnished under contract dated July 21, 1902, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad of The City of New York, from January 1, 1907, to June 30, 1907.

Requisition.	To date.	Payments authorized.	To whom.	Amount.
	1907.	1907.		
16	To January 31	February 20	As stated on page 4741 of the minutes of the Rapid Transit Commission	Rapid Transit Subway Construction Co.	$35,564 70
17	February 28	March 25	As stated on page 4795 of said minutes	Rapid Transit Subway Construction Co.	32,427 33
18	March 31	April 18	As stated on page 4843 of said minutes	Rapid Transit Subway Construction Co.	60,384 10
19	April 30	May 16	As stated on page 4922 of said minutes	Rapid Transit Subway Construction Co.	71,830 40
20	May 31	June 27	As stated on page 5019 of said minutes	Rapid Transit Subway Construction Co.	35,599 20
Total amount paid to Rapid Transit Subway Construction Company, contractor, for extra work done and materials furnished under contract dated July 21, 1902, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad from January 1, 1907, to June 30, 1907				$235,805 73

DISBURSEMENTS — *Continued.*

X. REAL ESTATE.

Statement showing the Requisitions made upon the Board of Rapid Transit Railroad Commissioners, and the payments authorized under the direction of the Rapid Transit Board, to be made for Real Estate acquired, for and in behalf of the City of New York, under provision of the contract with *Rapid Transit Subway Construction Company, Contractor*, dated July 21, 1902, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad, from January 1, 1907, to June 30, 1907.

DISBURSEMENTS.	Amount.	Total.
CLERICAL SERVICE.		
Compensation of the clerk of the commissioners of appraisal appointed by the Appellate Division of the Supreme Court, Second Judicial District, relative to lands situated, viz.:		
Easements — Lands under Joralemon and other streets, in the Borough of Brooklyn, New York city	$600 00	
The city of New York — Reimbursement of a fund for expenses of commissioners of estimate and appraisal for clerks, etc.; services rendered the commissioners of appraisal appointed by the Appellate Division of the Supreme Court, Second Judicial District, relative to lands situated, viz.:		
Estate in fee — Triangular parcel of land bounded by Flatbush, Fourth and Atlantic avenues, in the Borough of Brooklyn, New York city	96 78	
Stenographic services rendered the commissioners of appraisal appointed by the Appellate Division of the Supreme Court, Second Judicial District, relative to lands situated, viz.:		
Estate in fee — Triangular parcel of land bounded by Flatbush, Fourth and Atlantic avenues, in the Borough of Brooklyn, New York city	239 75	
Easements — Lands at Joralemon and Furman streets, in the Borough of Brooklyn, New York city	330 70	
		$1,267 23
COMMISSIONERS OF APPRAISAL.		
Compensation for commissioners of appraisal appointed by the Appellate Division of the Supreme Court, Second Judicial District, relative to lands, situated, viz.:		
Estate in fee — Triangular parcel of land bounded by Flatbush, Fourth and Atlantic avenues, in the Borough of Brooklyn, New York city	.....	850 00
REAL ESTATE.		
Easement property (rights, privileges, etc.), northeast corner of Bridge and Fulton streets, viz.: Payment made for the release and conveyance in perpetuity, pursuant to an agreement made with Mrs. Jane T. Jones of the easements appurtenant to the land situated at the northeast corner of Bridge and Fulton streets, in the Borough of Brooklyn, New York city	$7,166 66	
Easement property (rights, privileges, etc.), southwest corner of Fulton and Hoyt streets, viz.: Payment made for the release and conveyance in perpetuity, pursuant to an agreement made with George J. Smith, of the easements appurtenant to the land situated at the southwest corner of Fulton and Hoyt streets, in the Borough of Brooklyn, New York city	6,000 00	
		13,166 66
Total amount paid for real estate acquired under provision of the contract with *Rapid Transit Subway Construction Company, contractor*, dated July 21, 1902, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad, from January 1, 1907, to June 30, 1907	.....	$15,283 89

DISBURSEMENTS — *Continued.*

XI. INTEREST ON CORPORATE STOCK.

Statement showing the payments made under the direction of the City Comptroller, for interest due on the Corporate Stock issued by The City of New York, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad, from January 1, 1907, to June 30, 1907.

No.	For What.	Due.	Amount.
8	The payment of interest due on the corporate stock issued by The City of New York, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad.....	May 1, 1907	$41,778 75
	Total amount in interest paid on the corporate stock issued by The City of New York, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad from January 1, 1907, to June 30, 1907.....	.....	$41,778 75

BROOKLYN-MANHATTAN LOOP LINES (MANHATTAN SECTIONS) CONSTRUCTION FUND.

XII. REQUISITIONS AND APPROPRIATIONS.

Statement of Requisitions made upon the Board of Estimate and Apportionment, for the authorization for the issue of Corporate Stock of the City of New York and the Appropriations made by the Board of Estimate and Apportionment, the proceeds thereof to be applied to the requirements of the Brooklyn-Manhattan Loop Lines (Manhattan Sections) Construction Funds, from January 1, 1907, to June 30, 1907.

No.	Authorized.	Amount.	Appropriation.	Amount.
1.	April 18, 1907. As stated on page 4849 of the minutes of the Rapid Transit Board, viz.: Centre street, from Pearl street to Canal street. (Section 9-0-2, sub-title No. 1.) The Degnon Contracting Company, Contractor. Construction ..... $2,952,000 00 Pipe Galleries 83,000 00	$3,035,000 00	April 19, 1907. As stated on page 1230 of the minutes of the Board of Estimate and Apportionment	$3,035,000 00
2.	May 23, 1907. As stated on page 4938 of the minutes of the Rapid Transit Board, viz.: Centre street, from Canal street to Broome street. (Section 9-0-3, sub-title No. 2.) Cranford Company, Contractor. Construction ..... $2,150,000 00 Pipe Galleries 60,000 00	2,210,000 00	May 24, 1907. As stated on page 1794 of the minutes of the Board of Estimate and Apportionment	2,210,000 00
3.	June 13, 1907. As stated on page 4985 of the minutes of the Rapid Transit Board, viz.: Centre street, from Pearl street to Park Row. (Section 9-0-1, sub-title No. 3.) Bradley Contracting Company, Contractor. Construction ..... $998,328 00 Pipe galleries 5,500 00	1,003,828 00	June 21, 1907. As stated on page 2203 of the minutes of the Board of Estimate and Apportionment	1,003,828 00
4.	June 13, 1907. As stated on page 4986 of the minutes of the Rapid Transit board, viz.: New extension of Delancey street, from Centre street to the Bowery. (Section 9-0-4, sub-title No. 4.) Bradley Contracting Company, contractor. Construction ..... $1,518,302 00 Pipe galleries 29,040 00	1,547,342 00	June 21, 1907. As stated on page 2388 of the minutes of the Board of Estimate and Apportionment	1,547,342 00
	Carried forward	$7,796,170 00	Carried forward	$7,796,170 00

REQUISITIONS AND APPROPRIATIONS, *Continued.*

No.	Authorized.	Amount.	Appropriation.	Amount.
	Brought forward	$7,796,170 00	Brought forward	$7,796,170 00
5.	June 13, 1907. As stated on page 4986 of the minutes of the Rapid Transit board, viz.: Delancey street, between the Bowery and Norfolk street. (Section 9-0-5, sub-title No. 5.) Bradley Contracting Company, contractor. Construction $1,229,136 00 Pipe galleries 69,300 00	1,298,436 00	June 21, 1907. As stated on page 2283 of the minutes of the Board of Estimate and Apportionment	1,298,436 00
	Total amount of requisitions made upon the Board of Estimate and Apportionment for the requirements of the Board of Rapid Transit Railroad Commissioners in the construction of the Brooklyn-Manhattan Loop Lines (Manhattan sections), January 1, 1907 to June 30, 1907	$9,094,606 00	Total amount of appropriations made by the Board of Estimate and Apportionment, the proceeds to be applied to the construction of the Brooklyn-Manhattan loop lines (Manhattan sections), January 1, 1907, to June 30, 1907	$9,094,606 00

GENERAL FUND.

XIII. BALANCES.

a. Statement showing the balance of the General Fund, June 30, 1907.

Year.	Appropriations.		Disbursements.	Excess disbursements chargeable to the current issue of special revenue bonds.	Surplus applicable with the current appropriation.
		UNEXPENDED BALANCE, 1906.			
1906	$21,108 19	Unexpended balance of the general fund, December 31, 1906	.....	.....	$21,108 19
		APPROPRIATIONS, 1907.			
1907	376,836 00	Amount of appropriations made by the Board of Estimate and Apportionment applied to the purposes of the Board of Rapid Transit Railroad Commissioners, from January 1, 1907, to June 30, 1907	.....	.....	.....
		DISBURSEMENTS, JANUARY 1, 1907, TO JUNE 30, 1907.			
1907	.....	Administrative and general office $68,798 39 Engineering 300,244 99 Legal 91,691 17	$460,734 55	$83,898 55	.....
		EXCESS DISBURSEMENTS TO JUNE 30, 1907.			
1907	62,790 36	Excess disbursements of the general fund June 30, 1907, chargeable to the current issue of special revenue bonds	.....	.....	62,790 36
	$460,734 55	.....	$460,734 55	$83,898 55	$83,898 55

MANHATTAN-THE BRONX CONSTRUCTION FUND.

BALANCES.

b Statement showing the balance of the Manhattan-The Bronx Construction Fund, June 30, 1907.

Year.	Amount of proceeds of corporate stock issued.		Disbursements.	Excess disbursements chargeable to the current stock issue.	Surplus applicable with the proceeds of the current stock issue.
1906	$439,040 91	UNEXPENDED BALANCES, 1906. Unexpended balance of the Manhattan-The Bronx construction fund, December 31, 1906	.....	.....	$439,040 91
1907	.....	CORPORATE STOCK, TO JUNE 30, 1907. Amount of proceeds of corporate stock issued by the city of New York for the construction and operation of the Manhattan-The Bronx Rapid Transit Railroad, from January 1, 1907, to June 30, 1907	.....	.....	.....
1907	.....	DISBURSEMENTS, JANUARY 1, 1907, TO JUNE 30, 1907. Disbursements, viz., Manhattan-The Bronx Rapid Transit Railroad: For extra work done and materials furnished ..... $759,211 96 For real estate 23,381 73	$782,593 69	$782,593 69	.....
1907	343,552 78	EXCESS DISBURSEMENTS TO JUNE 30, 1907. Excess disbursements of the Manhattan-The Bronx construction fund, June 30, 1907, chargeable to the proceeds of the current issue of corporate stock	.....	.....	343,552 78
	$782,593 69		$782,593 69	$782,593 69	$782,593 69

BROOKLYN-MANHATTAN CONSTRUCTION FUND.

BALANCES.

c Statement showing the balance of the Brooklyn-Manhattan Construction Fund, June 30, 1907.

Year.	Amount of proceeds of corporate stock issued.		Disbursements	Excess disbursements chargeable to the current stock issued.	Surplus applicable with the proceeds of the current stock issue.
		UNEXPENDED BALANCES, 1906.			
1906	$20,605 91	Unexpended balance of the Brooklyn-Manhattan construction fund, December 31, 1906	.....	.....	$20,605 91
		CORPORATE STOCK, TO JUNE 30, 1907.			
1907	36,000 00	Amount of proceeds of corporate stock issued by the city of New York for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad, from January 1, 1907, to June 30, 1907	.....	.....	.....
		DISBURSEMENTS, JANUARY 1, 1907, TO JUNE 30, 1907.			
1907	.....	Disbursements, viz., Brooklyn-Manhattan Rapid Transit Railroad:			
		For work done and materials furnished $80,058 02			
		For extra work done and materials furnished 235,805 73			
		For real estate 15,283 89			
		For interest on the corporate stock 41,778 75			
			$372,926 39	$336,926 39	.....
		EXCESS DISBURSEMENTS, TO JUNE 30, 1907.			
1907	316,320 48	Excess disbursements of the Brooklyn-Manhattan construction fund, June 30, 1907, chargeable to the proceeds of a current issue of corporate stock	.....	.....	316,320 48
	$372,926 39		$372,926 39	$336,926 39	$336,926 39

MANHATTAN-THE BRONX CONTRACT.

XIV. SECURITY.

Statement of the security deposited by *John B. McDonald, Contractor, and Interborough Rapid Transit Company*, under provision of the contract of February 21, 1900, and the agreements amendatory thereof and supplemental thereto, for the construction, maintenance and operation of the Manhattan-The Bronx Rapid Transit Railroad, remaining in the custody of The City of New York June 30, 1907.

Bond — For construction and equipment, deposited with the City Comptroller February 21, 1900 ..... $5,000,000.

SURETIES.

The Rapid Transit Subway Construction Company of New York, $4,000,000.

The United States Fidelity and Guaranty Company of Maryland, $250,000.

The Empire State Surety Company of New York, $250,000.

The American Surety Company of New York, $250,000.

The National Surety Company of New York, $250,000.

Bond — (continuing). For rental and also for construction deposited (substituted) with the City Comptroller January 14, 1904 ..... $1,000,000.

SURETIES.

Fidelity and Deposit Company of Maryland, $500,000.

United States Fidelity and Guaranty Company of Maryland, $500,000.

Bonds of the subcontractors for construction, assigned to The City of New York as additional security by John B. McDonald, Contractor, and deposited with the Rapid Transit Board, aggregating ..... $3,378,250.

CITY LIEN ON EQUIPMENT.

The city shall also have a first lien upon the equipment of the railroad, as further security for the faithful performance by the contractor of the covenants, conditions and agreements of the contract of February 21, 1900, and the agreements amendatory thereof and supplemental thereto. Such lien shall arise immediately upon the acquisition by the contractor of any part of the equipment for use on or in connection with the said railroad or any part of it, or intended for such use, whether or not such equipment be set up or delivered upon or at the railway.

BROOKLYN-MANHATTAN CONTRACT.

SECURITY.

[b] Statement of the security deposited by *Rapid Transit Subway Construction Company, Contractor*, under provision of the contract of July 21, 1902 and the agreements amendatory thereof and supplemental thereto, for the construction, maintenance and operation of the Brooklyn-Manhattan Rapid Transit railroad, remaining in the custody of the city of New York June 30, 1907.

Amount in Cash — For construction pursuant to the contract deposited with the City Chamberlain September 11, 1902.... $1,000,000.

Bond — (continuing). For rental and also for construction deposited (substituted) with the City Comptroller February 10, 1905 . . .. $1,000,000.

SURETIES.

United States Fidelity and Guaranty Company of Maryland, $250,000.

Fidelity and Deposit Company of Maryland, $250,000.

The National Surety Company of New York, $250,000.

The Aetna Indemnity Company of Connecticut, $100,000.

The Empire State Surety Company of New York, $150,000.

Bond of the subcontractors for construction, assigned to The City of New York as additional security by Rapid Transit Subway Construction Company, Contractor, and deposited with the Rapid Transit Board, aggregating..... $650,000.

CITY LIEN ON EQUIPMENT.

"The City shall also have a first lien upon the equipment of the Railroad as further security for the faithful performance by the Contractor of the covenants, conditions and agreements of the contract of July 21, 1902, and the agreements amendatory thereof and supplemental thereto. Such lien shall arise immediately upon the acquisition by the Contractor of any part of the equipment for use on or in connection with the said railroad or any part of it, or intended for such use, whether or not such equipment be set up or delivered upon or at the railway."

MANHATTAN-THE BRONX CONTRACT.

XIV. SECURITY.

A Statement of the security deposited by *John B. McDonald, Contractor, and Interborough Rapid Transit Company*, under provision of the contract of February 21, 1900, and the agreements amendatory thereof and supplemental thereto, for the construction, maintenance and operation of the Manhattan-The Bronx Rapid Transit Railroad, remaining in the custody of The City of New York June 30, 1907.

Bond — For construction and equipment, deposited with the City Comptroller February 21, 1900 ..... $5,000,000.

SURETIES.

The Rapid Transit Subway Construction Company of New York, $4,000,000.

The United States Fidelity and Guaranty Company of Maryland, $250,000.

The Empire State Surety Company of New York, $250,000.

The American Surety Company of New York, $250,000.

The National Surety Company of New York, $250,000.

Bond — (continuing). For rental and also for construction deposited (substituted) with the City Comptroller January 14, 1904 . . .. $1,000,000.

SURETIES.

Fidelity and Deposit Company of Maryland, $500,000.

United States Fidelity and Guaranty Company of Maryland, $500,000.

Bonds of the subcontractors for construction, assigned to The City of New York as additional security by John B. McDonald, Contractor, and deposited with the Rapid Transit Board, aggregating . . .. $3,378,250.

CITY LIEN ON EQUIPMENT.

The city shall also have a first lien upon the equipment of the railroad, as further security for the faithful performance by the contractor of the covenants, conditions and agreements of the contract of February 21, 1900, and the agreements amendatory thereof and supplemental thereto. Such lien shall arise immediately upon the acquisition by the contractor of any part of the equipment for use on or in connection with the said railroad or any part of it, or intended for such use, whether or not such equipment be set up or delivered upon or at the railway.

BROOKLYN-MANHATTAN CONTRACT.

SECURITY.

b Statement of the security deposited by *Rapid Transit Subway Construction Company, Contractor*, under provision of the contract of July 21, 1902 and the agreements amendatory thereof and supplemental thereto, for the construction, maintenance and operation of the Brooklyn-Manhattan Rapid Transit railroad, remaining in the custody of the city of New York June 30, 1907.

Amount in Cash — For construction pursuant to the contract deposited with the City Chamberlain September 11, 1902.... $1,000,000.

Bond — (continuing). For rental and also for construction deposited (substituted) with the City Comptroller February 10, 1905 . . .. $1,000,000.

SURETIES.

United States Fidelity and Guaranty Company of Maryland, $250,000.

Fidelity and Deposit Company of Maryland, $250,000.

The National Surety Company of New York, $250,000.

The Aetna Indemnity Company of Connecticut, $100,000.

The Empire State Surety Company of New York, $150,000.

Bond of the subcontractors for construction, assigned to The City of New York as additional security by Rapid Transit Subway Construction Company, Contractor, and deposited with the Rapid Transit Board, aggregating..... $650,000.

CITY LIEN ON EQUIPMENT.

"The City shall also have a first lien upon the equipment of the Railroad as further security for the faithful performance by the Contractor of the covenants, conditions and agreements of the contract of July 21, 1902, and the agreements amendatory thereof and supplemental thereto. Such lien shall arise immediately upon the acquisition by the Contractor of any part of the equipment for use on or in connection with the said railroad or any part of it, or intended for such use, whether or not such equipment be set up or delivered upon or at the railway."

BROOKLYN-MANHATTAN LOOP LINES (MANHATTAN SECTIONS) CONTRACTS.

SECURITY.

c Statement of the security deposited under the provisions of the various contracts for the construction of the Brooklyn-Manhattan Loop Lines (Manhattan Sections) remaining in the custody of The City of New York, June 30, 1907.

Section 9-0-1: Centre street from Pearl street to Park Row, Bradley Contracting Company, Contractor.

Bond — For construction, deposited with the City Comptroller.. $160,000.

SURETIES.

Title Guaranty and Surety Company, Scranton, Pa., $55,000.

Empire State Surety Company, New York, $55,000.

People's Surety Company, New York, $50,000.

Section 9-0-2: Centre street from Pearl street to Canal street, The Degnon Contracting Company, Contractor.

Bond — For construction deposited with the City Comptroller.. $300,000.

SURETIES.

Bankers' Surety Company, Cleveland, Ohio, $55,000.

United Surety Company, Baltimore. Md., $60,000.

People's Surety Company, New York, $50,000.

Aetna Indemnity Company, Hartford, Conn., $60,000.

Title Guaranty and Surety Company, Scranton, Pa., $75,000.

Section 9-0-3: Centre street from Canal street to Broome street, Cranford Company, Contractor.

Bond — For construction deposited with the City Comptroller.. $150,000.

SURETIES.

Empire State Surety Company, New York, $50,000.

Title Guaranty and Surety Company, Scranton, Pa., $50,000.

People's Surety Company, New York, $50,000.

Section 9-0-4: New extension of Delancey street from Centre street to the Bowery, Bradley Contracting Company, Contractor.

Bond — For construction deposited with the City Comptroller.. $150,000.

SURETIES.

Title Guaranty and Surety Company, Scranton, Pa., $50,000.

Empire State Surety Company, New York, $50,000.

People's Surety Company, New York, $50,000.

Section 9-0-5: Delancey street between the Bowery and Norfolk street, Bradley Contracting Company, Contractor.

Bond — For construction deposited with the City Comptroller.. $180,000

SURETIES.

Title Guaranty and Surety Company, Scranton, Pa., $65 000.

Empire State Surety Company, New York, $65,000.

People's Surety Company New York, $50,000.

XV. RAPID TRANSIT RAILROAD RENTAL.

a. MANHATTAN–THE BRONX.

Statement showing the payments made under the direction of the City Comptroller for interest due on the Corporate Stock issued by The City of New York for the construction and operation of the Manhattan-The Bronx Rapid Transit Railroad, and the rental received by the City Comptroller from Interborough Rapid Transit Company under a lease by The City of New York of the Manhattan-The Bronx Rapid Transit Railroad constructed under the contract with *John B. McDonald, Contractor,* dated February 21, 1900, and the agreements amendatory thereof and supplemental thereto assigned to the Interborough Rapid Transit Company, from January 1, 1907, to June 30, 1907:

RENTAL.						INTEREST ON CORPORATE STOCK.				
Due.	Date received.	From	Payments to the sinking fund.	For interest on corporate stock.	Total.	No.	For what.	Due.	Amount.	Total.
		Amount in rental received by the City Comptroller from Interborough Rapid Transit Company to December 31, 1906....	$810,376 57	$2,554,325 21	$3,364,701 78		Amount in interest paid by the City Comptroller to December 31, 1906.....	.....	.....	$2,324,820 25
1907.	1907.					14	The payments of interest due on the corporate stock issued by the City of New York for the construction and operation of the Manhattan-The Bronx Rapid Transit Railroad	1907.		
Jan. 1	Jan. 31	Interborough Rapid Transit Co.....	.....	$369,926 18				May 1	$774,418 75	
Apr. 1	Apr. 29	Interborough Rapid Transit Co.....	.....	371,436 97						
		Total amounts in rental received by the City Comptroller from Interborough Rapid Transit Company under a lease by the City of New York of the Manhattan-The Bronx Rapid Transit Railroad to June 30, 1907.....		$741,363 15	741,363 15		Amount in interest paid by the City Comptroller on the corporate stock issued by the City of New York for the construction and operation of the Manhattan-The Bronx Rapid Transit Railroad to June 30, 1907.....	.....	.....	774,418 75
					$4,106,064 93					$3,099,239 00

XV. RAPID TRANSIT RAILROAD RENTAL.

b. BROOKLYN–MANHATTAN.

Statement showing the payments made under the direction of the City Comptroller for interest due on the Corporate Stock issued by The City of New York for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad, and the rental received by the City Comptroller from Interborough Rapid Transit Company under a lease by The City of New York of the Brooklyn-Manhattan Rapid Transit Railroad constructed under the contract with *Rapid Transit Subway Construction Company, Contractor*, dated July 21, 1902, and the agreements amendatory thereof and supplemental thereto assigned to the Interborough Rapid Transit Company, from January 1, 1907, to June 30, 1907:

RENTAL.					INTEREST ON CORPORATE STOCK.				
Due.	Date received.	From	Payments to the sinking fund.	For interest on corporate stock.	Total.	No.	For what.	Due.	Amount.	Total.
		Amount in rental received by the City Comptroller from Interborough Rapid Transit Company to December 31, 1906....	$5,255 29	$23,719 87	$28,975 16		*Amount in interest paid by the City Comptroller to December 31, 1906	1907.	.....	.....
1907. Jan. 1	1907. Jan. 30	Interborough Rapid Transit Company....	.....	$4,740 05		8	*The payments of interest due on the corporate stock issued by the City of New York for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad.....	May 1	.....	.....
Apr. 1	Apr. 29	Interborough Rapid Transit Company.....	.....	4,740 05						
		Total amounts in rental received by the City Comptroller from Interborough Rapid Transit Company under a lease by the City of New York of the Brooklyn-Manhattan Rapid Transit Railroad to June 30, 1907.	.....	$9,480 10	9,480 10		*Amount in interest paid by the City Comptroller on the corporate stock issued by the City of New York for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad to June 30, 1907.....	.....	.....	.....
					$38,455 26					

* The amount of interest on the corporate stock issued, due May 1, 1907, was applied to the "Interest on Corporate Stock" account, Brooklyn-Manhattan Construction Fund disbursements.

XVI. RECAPITULATION.

BOARD OF RAPID TRANSIT RAILROAD COMMISSIONERS.

General Fund, 1894–1907.

a. REQUISITION AND APPROPRIATIONS.

Total amount of requisitions made upon the Board of Estimate and Apportionment for the requirements of the Board of Rapid Transit Railroad Commissioners during the period of:—			Total amount of appropriations made by the Board of Estimate and Apportionment for the purposes of the Board of Rapid Transit Railroad Commissioners during the period of:—	
1894. Amount of requisitions		$5,000 00	1894. Amount of appropriations	$5,000 00
1895. Amount of requisitions	$89,434 75		1895. Amount of appropriations	53,795 88
Aggregate appropriation made by the Board of Estimate and Apportionment in excess of the amount of the original requisitions	1,816 31			
		91,251 06		
1896. Amount of requisitions		66,047 93	1896. Amount of appropriations	102,135 60
1897. Amount of requisitions	$94,482 21		1897. Amount of appropriations	66,009 59
Aggregate appropriation made by the Board of Estimate and Apportionment reduced to suffice the purposes of the original requisitions	14,433 04			
		80,049 17		
1898. Amount of requisitions	$42,943 37		1898. Amount of appropriations	53,380 91
Aggregate appropriation made by the Board of Estimate and Apportionment reduced to suffice the purposes of the original requisitions	5,869 55			
		37,073 82		
1899. Amount of requisitions		27,625 33	1899. Amount of appropriations	27,625 33
1900. Amount of requisitions		246,393 28	1900. Amount of appropriations	246,393 28
1901. Amount of requisitions		423,521 60	1901. Amount of appropriations	423,521 60
1902. Amount of requisitions		613,500 00	1902. Amount of appropriations	613,500 00
1903. Amount of requisitions	$572,000 00		1903. Amount of appropriations	542,000 00
Re-appropriation. No bonds to be issued	30,000 00			
		542,000 00		
1904. Amount of requisitions		576,000 00	1904. Amount of appropriations	576,000 00
1905. Amount of requisitions		640,605 00	1905. Amount of appropriations	640,605 00
1906. Amount of requisitions		731,160 00	1906. Amount of appropriations	731,160 00
1907. Amount of requisitions		*853,167 00	1907. Amount of appropriations	*853,167 00
Total amount of requisitions made upon the Board of Estimate and Apportionment for the general fund from 1894 to 1907, inclusive		$4,934,294 19	Total amount of appropriations to the general fund from 1894 to 1907, inclusive	$4,934,294 19

* Part of this appropriation ($476,331.) is applied to the purposes of the Public Service Commission for the First District.

GENERAL FUND, 1894–1907.*

b. DISBURSEMENTS.

YEAR.	Administrative, and general office.	Engineering.	Legal.	Total.	
Total amount of disbursements made under the direction of the Board of Rapid Transit Railroad Commissioners during the period of—					
1894. Amount of disbursements	$2,929 10	$1,271 34	$28 30	$4,228 74	
1895. Amount of disbursements	6,048 49	26,250 29	25,688 13	57,986 91	
1896. Amount of disbursements	35,572 34	17,028 82	31,457 53	84,058 69	
1897. Amount of disbursements	5,230 06	21,395 86	38,925 73	65,551 65	
1898. Amount of disbursements	4,521 15	17,930 31	29,519 13	51,970 59	
1899. Amount of disbursements	2,826 94	3,698 00	20,551 30	27,076 24	
1900. Amount of disbursements	53,866 33	161,047 23	27,356 19	242,269 75	
1901. Amount of disbursements	39,023 86	348,258 30	31,861 62	419,143 78	
1902. Amount of disbursements	45,576 10	458,389 79	33,547 26	537,513 15	
1903. Amount of disbursements	45,719 42	520,664 27	24,332 55	590,716 24	
1904. Amount of disbursements	57,965 11	530,936 37	27,446 87	616,348 35	
1905. Amount of disbursements	48,945 59	513,535 00	48,977 91	611,458 50	
1906. Amount of disbursements	45,384 68	586,503 74	119,807 99	751,696 41	
1907.* Amount of disbursements	68,798 39	300,244 99	91,691 17	460,734 55	
	$462,407 56	$3,507,154 31	$551,191 68	.....	
Total amount of general fund disbursements, from 1894 to 1907,* inclusive	.....	.....	.....	.....	$4,520,753 55

* For the six months ending June 30, 1907.

MANHATTAN-THE BRONX CONSTRUCTION FUND, 1894-1907.

c. REQUISITIONS AND APPROPRIATIONS.

Total amount of the requisitions made upon the Board of Estimate and Apportionment for the requirements of the Board of Rapid Transit Railroad Commissioners during the period:			
1900. Amount of the requisitions.	Construction	$35,000,000 00	
	Terminals	1,000,000 00	
	Real estate	500,000 00	
			$36,500,000 00
1901. Amount of the requisitions			
1902. Amount of the requisitions			
1903. Amount of the requisitions—extra work			3,000,000 00
1904. Amount of the requisitions.	Real estate	$1,500,000 00	
	Terminals	750,000 00	
	Extra work and for ducts	1,500,000 00	
			3,750,000 00
1905. Amount of the requisitions.	Interest on corporate stock		2,965,392 65
1906. Amount of the requisitions.	Extra work, Van Cortlandt Park extension		675,000 00
*1907. Amount of the requisitions.	Extra work at R. T. station at 149th street and Third avenue, borough of the Bronx	$15,000 00	
	Interest on corporate stock	729,773 63	
			744,773 63
Total amount of the requisitions made upon the Board of Estimate and Apportionment for the requirements of the Board of Rapid Transit Railroad Commissioners in the construction of the Manhattan-The Bronx Rapid Transit Railroad from 1900 to 1907,* inclusive			$47,635,166 28

* For the six months ending June 30, 1907.

Total amount of the appropriations made by the Board of Estimate and Apportionment for the requirements of the Board of Rapid Transit Railroad Commissioners during the period:	
1900. Amount of the appropriations	$36,500,000 00
1901. Amount of the appropriations	
1902. Amount of the appropriations	
1903. Amount of the appropriations	3,000,000 00
1904. Amount of the appropriations	3,750,000 00
1905. Amount of the appropriations	2,965,392 65
1906. Amount of the appropriations	675,000 00
*1907. Amount of the appropriations	744,773 63
Total amount of the appropriations made by the Board of Estimate and Apportionment for the requirements of the Board of Rapid Transit Railroad Commissioners in the construction of the Manhattan-The Bronx Rapid Transit Railroad from 1900 to 1907,* inclusive	$47,635,166 28

BROOKLYN–MANHATTAN CONSTRUCTION FUND, 1894–1907.

d. REQUISITIONS AND APPROPRIATIONS.

Total amount of the requisitions made upon the Board of Estimate and Apportionment for the requirements of the Board of Rapid Transit Railroad Commissioners during the period:—		
1902. Amount of the requisitions. Construction	$2,000,000 00	
Terminals and real estate	1,000,000 00	$3,000,000 00
1903. Amount of the requisitions		
1904. Amount of the requisitions		
1905. Amount of the requisitions, extra work		1,620,000 00
1906. Amount of the requisitions		
1907. Amount of the requisitions		
Total amount of the requisitions made upon the Board of Estimate and Apportionment for the requirements of the Board of Rapid Transit Railroad Commissioners in the construction of the Brooklyn-Manhattan Rapid Transit Railroad from 1902 to 1907, inclusive		$4,620,000 00

Total amount of the appropriations made by the Board of Estimate and Apportionment for the requirements of the Board of Rapid Transit Railroad Commissioners during the period.—	
1902. Amount of the appropriations	$3,000,000 00
1903. Amount of the appropriations	
1904. Amount of the appropriations	
1905. Amount of the appropriations	1,620,000 00
1906. Amount of the appropriations	
1907. Amount of the appropriations	
Total amount of the appropriations made by the Board of Estimate and Apportionment for the requirements of the Board of Rapid Transit Railroad Commissioners in the construction of the Brooklyn-Manhattan Rapid Transit Railroad from 1902 to 1907, inclusive	$4,620,000 00

BROOKLYN-MANHATTAN LOOP LINES (MANHATTAN SECTIONS) CONSTRUCTION FUNDS, 1894–1907.*

e. REQUISITIONS AND APPROPRIATIONS.

Total amount of the requisitions made upon the Board of Estimate and Apportionment for the requirements of the Board of Rapid Transit Railroad Commissioners during the period:			Total amount of the appropriations made by the Board of Estimate and Apportionment for the requirements of the Board of Rapid Transit Railroad Commissioners during the period:—	
*1907. Amount of requisition.	Centre street from Pearl street to Canal street, section 9–0–2:		*1907. Amount of the appropriation	$3,035,000 00
	Construction	$2,952,000 00		
	Pipe galleries	83,000 00		
		$3,035,000 00		
*1907. Amount of requisition.	Centre street from Canal street to Broome street, section 9–0–3:		*1907. Amount of the appropriation	2,210,000 00
	Construction	$2,150,000 00		
	Pipe galleries	60,000 00		
		2,210,000 00		
*1907. Amount of requisition.	Centre street from Pearl street to Park Row, section 9–0–1:		*1907. Amount of the appropriation	1,003,828 00
	Construction	$998,328 00		
	Pipe galleries	5,500 00		
		1,003,828 00		
*1907. Amount of requisition.	New extension of Delancey street from Centre street to the Bowery, section 9–0–4:		*1907. Amount of the appropriation	1,547,342 00
	Construction	$1,518,302 00		
	Pipe galleries	29,040 00		
		1,547,342 00		
*1907. Amount of requisition.	Delancey street between the Bowery and Norfolk street, section 9–0–5:		*1907. Amount of the appropriation	1,298,436 00
	Construction	$1,229,136 00		
	Pipe galleries	69,300 00		
		1,298,436 00		
Total amount of the requisitions made upon the Board of Estimate and Apportionment for the requirements of the Board of Rapid Transit Railroad Commissioners in the construction of the Brooklyn-Manhattan Loop Lines (Manhattan Sections) for 1907*		$9,094,606 00	Total amount of the appropriations made by the Board of Estimate and Apportionment for the requirements of the Board of Rapid Transit Railroad Commissioners in the construction of the Brooklyn-Manhattan Loop Lines (Manhattan Sections) for 1907.*	$9,094,606 00

* For the six months ending June 30, 1907.

f. CORPORATE STOCK, 1894–1907.

I. MANHATTAN-THE BRONX CONSTRUCTION FUND.

Total amount of proceeds credited of the corporate stock issued by The City of New York for the construction of the Manhattan-The Bronx Rapid Transit Railroad during the period of:—			Proceeds.
1900.	Amount of stock issued	$1,000,000 00	
	" " premium	105,400 00	
			$1,105,400 00
1901.	Amount of stock issued	$11,000,000 00	
	" " premium	635,361 46	
			11,635,361 46
1902.	Amount of stock issued	$12,500,000 00	
	" " premium	803,663 70	
			13,303,663 70
1903.	Amount of stock issued	$11,865,000 00	
	" " premium	237,487 72	
			12,102,487 72
1904.	Amount of stock issued	$5,885,000 00	
	" " premium	82,938 37	
			5,967,938 37
1905.	Amount of stock issued	$2,300,000 00	
	" " premium	16,391 10	
			2,316,391 10
1906.	Amount of stock issued	.....	.....
1907.*	Amount of stock issued	.....	.....
Total amount of proceeds applicable to the construction of the Manhattan-The Bronx Rapid Transit Railroad from 1900 to 1907, inclusive			$46,431,242 35

II. BROOKLYN-MANHATTAN CONSTRUCTION FUND.

Total amount of proceeds credited of the corporate stock issued by The City of New York for the construction of the Brooklyn-Manhattan Rapid Transit Railroad during the period of:—			
1903.	Amount of stock issued.....	$301,000 00	
	" " premium.....	715 29	
			$301,715 29
1904.	Amount of stock issued.....	$1,065,000 00	
	" " premium.....	15,359 13	
			1,080,359 13
1905.	Amount of stock issued.....	$200,000 00	
	" " premium	1,425 32	
			201,425 32
1906.	Amount of stock issued.....	$750,000 00	
	" " premium.....	4,435 00	
			754,435 00
1907.*	Amount of stock issued.....	$36,000 00	
	" " premium.....	.....	
			36,000 00
Total amount of proceeds applicable to the construction of the Brooklyn-Manhattan Rapid Transit Railroad from 1902 to 1907, inclusive			$2,373,934 74

* For the six months ending June 30, 1907.

g. CONSTRUCTION FUNDS, 1894–1907.**

DISBURSEMENTS.

a. MANHATTAN–THE BRONX CONSTRUCTION FUND.

YEAR.	Work and materials.	Extra work and materials.	Terminals.	Real estate.	Interest on corporate stock.	Total.
Total amount of disbursements made in the construction of the Manhattan-The Bronx Rapid Transit Railroad during the period:—						
1900, amount of disbursements	$1,685,000 00	.....	.....	.....	.....	$1,685,000 00
1901, amount of disbursements	10,343,000 00	$162,000 00	.....	$9,515 45	$165,013 90	10,679,529 35
1902, amount of disbursements	11,436,000 00	631,000 00	.....	141,391 72	547,031 41	12,755,423 13
1903, amount of disbursements	6,930,000 00	2,563,021 47	$1,048,251 72	512,004 90	947,481 56	12,000,759 65
1904, amount of disbursements	3,220,000 00	932,304 61	701,748 28	863,195 62	1,305,865 78	7,023,114 29
1905, amount of disbursements	869,000 00	4,950 00	.....	163,622 76	†729,092 68	1,766,665 44
1906, amount of disbursements	.....	6,000 00	.....	75,709 58	*	81,709 58
**1907, amount of disbursements	.....	759,211 96	.....	23,381 73	*	782,593 69
	$34,483,000 00	$5,058,488 04	$1,750,000 00	$1,788,821 76	$3,694,485 33	
Total amount of Manhattan-The Bronx construction fund disbursements from 1900 to 1907, inclusive						$46,774,795 13

b. BROOKLYN–MANHATTAN CONSTRUCTION FUND.

YEAR.	Work and materials.	Extra work and materials.	Real estate.	Interest on corporate stock.	Total.
Total amount of disbursements made in the construction of the Brooklyn-Manhattan Rapid Transit Railroad during the period:					
1903, amount of disbursements	$202,457 06	.....	$706 80	$5 87	$203,169 73
1904, amount of disbursements	620,425 62	.....	1,200 00	20,196 40	641,822 02
1905, amount of disbursements	491,504 53	$82,895 00	2,450 80	50,533 59	627,383 92
1906, amount of disbursements	314,718 97	457,081 87	9,176 76	63,975 56	844,953 16
**1907, amount of disbursements	80,058 02	235,805 73	15,283 89	41,778 75	372,926 39
	$1,709,164 20	$775,782 60	$28,818 25	$176,490 17	
Total amount of Brooklyn-Manhattan construction fund disbursements from 1902 to 1907, inclusive					$2,690,255 22

*The total amounts of interest on the corporate stock issued, due in 1906 and May 1, 1907, were applied to the "*Rapid Transit Railroad, Rental*" account, Manhattan and The Bronx.

†An additional amount of interest on the corporate stock issued, due November 1, 1905, $775,982.75 was applied to the "*Rapid Transit Railroad, Rental*" account, Manhattan and The Bronx.

**For the six months ending June 30, 1907.

BOARD OF RAPID TRANSIT RAILROAD COMMISSIONERS.
THE CITY OF NEW YORK.

h. SUMMARY OF DISBURSEMENTS.

1894–1907.*

Total amount of general fund disbursements	$4,520,753 55
Total amount of Manhattan-The Bronx construction fund disbursements	46,774,795 13
Total amount of Brooklyn-Manhattan construction fund disbursements	2,690,255 22
Total amount disbursed by the Board of Rapid Transit Railroad Commissioners, from June 18, 1894, to June 30, 1907	$53,985,803 90

Respectfully submitted,
H. A. D. HOLLMANN,
Auditor.

* For the six months ending June 30, 1907.

APPENDIX G.

REPORT OF THE AUDITOR.

APPENDIX G.

REPORT OF THE AUDITOR.

For the six months ending December 31, 1907.

PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT, NEW YORK.

Auditor's Office, *December* 31, 1907.

The Honorable Public Service Commissioners for the First District, New York:

GENTLEMEN — I have the honor to submit herewith my report as Auditor, in relation to the finances and accounts of the Public Service Commission for the First District, for the period July 1, 1907, to December 31, 1907, giving in general and in detail the following:

I. REQUISITIONS FOR THE GENERAL FUND: (Folio 379.) A statement showing the Requisitions made upon the Board of Estimate and Apportionment for the authorization for the issue of Revenue Bonds for the requirements of the Public Service Commission for the First District, from July 1, 1907, to December 31, 1907.

II. APPROPRIATIONS FOR THE GENERAL FUND: (Folio 380.) A statement showing the Appropriations made by the Board of Estimate and Apportionment for the purposes of the Public Service Commission for the First District, from July 1, 1907, to December 31, 1907.

III. DISBURSEMENTS FROM THE GENERAL FUND: Statements showing the Disbursements from the General Fund made under the direction of the Public Service Commission for the First District, from July 1, 1907, to December 31, 1907, viz.:

a. Executive and General Office. (Folio 381.)
b. Legal Department. (Folio 381.)
c. Bureau of Gas and Electricity. (Folio 382.)
d. Engineering Department. (Folio 382.)

IV. REQUISITIONS AND APPROPRIATIONS FOR THE MANHATTAN-THE BRONX CONSTRUCTION FUND: (Folio 383.) A statement showing the Requisitions made upon the Board of Estimate and Apportionment for the authorization for the issue of Corporate Stock of The City of New York, and the appropriations made by the Board of Estimate and Apportionment, the proceeds thereof to be applied to the requirements of the Manhattan-The Bronx Construction

Fund, under provision of the contract with *John B. McDonald, Contractor*, dated February 21, 1900, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Manhattan-The Bronx Rapid Transit Railroad, from July 1, 1907, to December 31, 1907.

V. CORPORATE STOCK ISSUES OF THE CITY OF NEW YORK. MANHATTAN-THE BRONX CONSTRUCTION: (Folio 384.) A statement showing the issues of Corporate Stock of The City of New York, from July 1, 1907, to December 31, 1907, the proceeds thereof to be applied to the construction of the Manhattan-The Bronx Rapid Transit Railroad.

VI. DISBURSEMENTS FOR EXTRA WORK DONE AND MATERIALS FURNISHED. MANHATTAN-THE BRONX CONSTRUCTION: (Folio 385.) A statement showing the requisitions made upon the Public Service Commission for the First District and the payments authorized under the direction of the said Public Service Commission, to be made to *John B. McDonald, Contractor*, for Extra Work done and materials furnished under contract dated February 21, 1900, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Manhattan-The Bronx Rapid Transit Railroad from July 1, 1907, to December 31, 1907.

VII. DISBURSEMENTS FOR REAL ESTATE. MANHATTAN-THE BRONX CONSTRUCTION: (Folio 386.) A statement showing the payments authorized under the direction of the Public Service Commission for the First District, to be made for Real Estate acquired for and in behalf of The City of New York, under provision of the contract with *John B. McDonald, Contractor*, dated February 21, 1900, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Manhattan-The Bronx Rapid Transit Railroad, from July 1, 1907, to December 31, 1907.

VIII. CORPORATE STOCK OF THE CITY OF NEW YORK. BROOKLYN-MANHATTAN CONSTRUCTION: (Folio 387.) A statement showing the issues of Corporate Stock of The City of New York, from July 1, 1907, to December 31, 1907, the proceeds thereof to be applied to the construction of the Brooklyn-Manhattan Rapid Transit Railroad.

IX. DISBURSEMENTS FOR WORK DONE AND MATERIALS FURNISHED. BROOKLYN-MANHATTAN CONSTRUCTION: (Folio 388.) A statement showing the requisitions made upon the Public Service Commission for the First District, and the payments authorized under the direction of the said Public Service Commission, to be made to *Rapid Transit Subway Construction Company, Contractor*, for work done and materials furnished under contract dated July 21, 1902, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad from July 1, 1907, to December 31, 1907.

X. DISBURSEMENTS FOR EXTRA WORK DONE AND MATERIALS FURNISHED. BROOKLYN-MANHATTAN CONSTRUCTION: (Folio 389.) A statement showing the requisitions made upon the Public Service Commission for the First District, and the payments authorized under the direction of the said Public Service Commission to be made to *Rapid Transit Subway Construction Company, Contractor*, for extra work done and materials furnished under contract dated July 21, 1902, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad, from July 1, 1907, to December 31, 1907.

XI. DISBURSEMENTS FOR REAL ESTATE. BROOKLYN-MANHATTAN CONSTRUCTION: (Folio 390.) A statement showing the payments authorized under the direction of the Public Service Commission for the First District, to be made for Real Estate acquired for and in behalf of The City of New York, under provision of the contract with *Rapid Transit Subway Construction Company, Contractor*, dated July 21, 1902, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad, from July 1, 1907, to December 31, 1907.

XII. PAYMENT OF INTEREST ON THE CORPORATE STOCK ISSUED. BROOKLYN-MANHATTAN CONSTRUCTION: (Folio 391.) A statement showing the payments made under the direction of the City Comptroller for Interest due on the Corporate Stock issued by The City of New York, for the construction of the Brooklyn-Manhattan Rapid Transit Railroad, from July 1, 1907, to December 31, 1907.

XIII. REQUISITIONS AND APPROPRIATIONS FOR THE BROOKLYN-MANHATTAN LOOP LINES (MANHATTAN SECTIONS) CONSTRUCTION FUNDS: (Folio 392.) A statement showing the Requisitions made upon the Board of Estimate and Apportionment for the authorization for the issue of Corporate Stock of The City of New York, and the appropriations made by the Board of Estimate and Apportionment the proceeds thereof to be applied to the requirements of the Brooklyn-Manhattan Loop Lines (Manhattan Sections) Construction Funds under the provisions of the various contracts for the construction of the Manhattan Sections Nos. 9-0-1, 9-0-2, 9-0-3, 9-0-4, and 9-0-5 of the Brooklyn-Manhattan Loop Lines from July 1, 1907, to December 31, 1907.

XIV. CORPORATE STOCK OF THE CITY OF NEW YORK. BROOKLYN-MANHATTAN LOOP LINES (MANHATTAN SECTIONS) CONSTRUCTION: (Folio 393.) A statement showing the issues of Corporate Stock of The City of New York, from July 1, 1907, to December 31, 1907, the proceeds thereof to be applied to the construction of the Brooklyn-Manhattan Loop Lines (Manhattan Sections).

XV. DISBURSEMENTS FOR WORK DONE AND MATERIALS FURNISHED. BROOKLYN-MANHATTAN LOOP LINES (MANHATTAN SECTIONS) CONSTRUCTION: (Folio 394.) A statement showing the requisitions made upon the Public Service Commission for the First District, and the payments authorized under the direction of the said Public Service Commission to be made to the various Contractors for work done and materials furnished under the different contracts for the construction of the Brooklyn-Manhattan Loop Lines (Manhattan Sections), from July 1, 1907, to December 31, 1907.

XVI. PAYMENT OF INTEREST ON THE CORPORATE STOCK ISSUED. BROOKLYN-MANHATTAN LOOP LINES (MANHATTAN SECTIONS) CONSTRUCTION: (Folio 395.) A statement showing the payments made under the direction of the City Comptroller for Interest due on the Corporate Stock issued by The City of New York, for the construction of the Brooklyn-Manhattan Loop Lines (Manhattan Sections), from July 1, 1907, to December 31, 1907.

XVII. BALANCES OF THE FUND ACCOUNTS: Statements showing the yearly balances of the various Funds, viz.:

a. General Fund. (Folio 396.)
b. Manhattan-The Bronx Construction Fund. (Folio 397.)
c. Brooklyn-Manhattan Construction Fund. (Folio 398.)
d. Brooklyn-Manhattan Loop Lines (Manhattan Sections) Construction Funds. (Folio 399.)

XVIII. SECURITY: Statements relative to the Securities deposited under the provisions of the various Contracts for Railroad Construction and Operation.

a. Manhattan-The Bronx Contract. (Folio 400.)
b. Brooklyn-Manhattan Contract. (Folio 400.)
c. Brooklyn-Manhattan Loop Lines (Manhattan Sections) Contracts. (Folios 401, 402.)

XIX. RENTAL: Statements showing the rental received by the City Comptroller under leases by The City of New York of the following Railroads, viz.:

a. Manhattan-The Bronx Rapid Transit Railroad. (Folio 403.)
b. Brooklyn-Manhattan Rapid Transit Railroad. (Folio 404.)

XX. TRUST FUNDS ACCOUNTS: (Folio 405.) Statements relative to Funds collected by the Public Service Commission for the First District, New York, and paid into the City Treasury, viz.:

a. Miscellaneous Supplies Fund.
b. Gas Fund.

XXI. A Recapitulation of the following, viz.:

a. General Fund Requisitions and Appropriations, 1894 to 1907, inclusive. (Folio 406.)
b. General Fund Disbursements, 1894 to 1907, inclusive. (Folio 407.)

c. Manhattan-The Bronx Construction Fund Requisitions and Appropriations, 1894 to 1907, inclusive. (Folio 408.)
d. Brooklyn-Manhattan Construction Fund Requisitions and Appropriations, 1894 to 1907, inclusive. (Folio 409.)
e. Brooklyn-Manhattan Loop Lines (Manhattan Sections) Construction Funds Requisitions and Appropriations in the year 1907. (Folio 410.)
f. Corporate Stock issued by the City of New York for Railroad Construction, 1894 to 1907, inclusive, viz.:
  (1) Manhattan-The Bronx Construction Fund. (Folio 411.)
  (2) Brooklyn-Manhattan Construction Fund. (Folio 411.)
  (3) Brooklyn-Manhattan Loop Lines (Manhattan Sections) Construction Funds. (Folios 412, 413.)
g. Construction Fund Disbursements, 1894 to 1907, inclusive, viz.:
  (1) Manhattan-The Bronx Construction. (Folio 414.)
  (2) Brooklyn-Manhattan Construction. (Folio 415.)
  (3) Brooklyn-Manhattan Loop Lines (Manhattan Sections) Construction. (Folio 416.)
h. A Summary of all Disbursements. (Folio 417.)

GENERAL FUND.

I. REQUISITIONS.

Statement of Requisitions made upon the Board of Estimate and Apportionment for the issue of Revenue Bonds for the requirements of the Public Service Commission for the First District, from July 1, 1907, to December 31, 1907.

November 18, 1907. As stated on page 700 of the minutes of the Public Service Commission for the First District.....	$121,000 00
Amount previously included in the requisition upon the Board of Estimate, dated December 27, 1906, and remaining unappropriated	84,000 00
* December 2, 1907. As stated on page 770 of the minutes of the Public Service Commission for the First District....	.....
Total amount of requisitions made upon the Board of Estimate and Apportionment for the requirements of the Public Service Commission for the First District, from July 1, 1907, to December 31, 1907.....	$37,000 00

* Requisition made upon the Board of Estimate and Apportionment for the requirements of the Public Service Commission for the First District for the year 1908.

GENERAL FUND.

II. APPROPRIATIONS.

Statement showing the Appropriations made by the Board of Estimate and Apportionment for the purposes of the Board of Rapid Transit Railroad Commissioners, and applied to the requirements of the Public Service Commission for the First District, from July 1, 1907, to December 31, 1907.

DATE.	Issue of revenue bonds.	Proceeds deposited in the city treasury.		Total.
January 25, 1907. As stated on page 305 of the minutes of the Board of Estimate and Apportionment.	4½% bonds, redeemable 1908	July 2, 1907	$5,000 00	
	4% bonds, redeemable 1908	July 12, 1907	5,000 00	
	4% bonds, redeemable 1908	July 15, 1907	5,000 00	
	4% bonds, redeemable 1908	July 18, 1907	5,000 00	
	4% bonds, redeemable 1908	July 24, 1907	44,389 63	
	4½% bonds, redeemable 1908	July 24, 1907	5,610 37	
	4½% bonds, redeemable 1908	August 8, 1907	6,000 00	
	4½% bonds, redeemable 1908	August 28, 1907	42,000 00	
	4½% bonds, redeemable 1908	September 17, 1907	4,729 16	
	5% bonds, redeemable 1908	September 17, 1907	15,270 84	
	3% bonds, redeemable 1908	September 25, 1907	30,000 00	
	3% bonds, redeemable 1908	September 25, 1907	7,500 00	
	3% bonds, redeemable 1908	October 2, 1907	3,000 00	
	3% bonds, redeemable 1908	October 10, 1907	30,000 00	
	3% bonds, redeemable 1908	October 16, 1907	10,000 00	
	3% bonds, redeemable 1908	November 1, 1907	50,000 00	
	3% bonds, redeemable 1908	November 7, 1907	2,500 00	
	3% bonds, redeemable 1908	November 12, 1907	2,900 00	
	3% bonds, redeemable 1908	November 14, 1907	6,600 00	
	3% bonds, redeemable 1908	November 23, 1907	5,000 00	
	3% bonds, redeemable 1908	November 26, 1907	60,000 00	
	3% bonds, redeemable 1908	December 10, 1907	5,000 00	
	3% bonds, redeemable 1908	December 14, 1907	5,550 00	
	3% bonds, redeemable 1908	December 16, 1907	3,000 00	
	3% bonds, redeemable 1908	December 18, 1907	3,000 00	
	3% bonds, redeemable 1908	December 23, 1907	3,614 00	$365,664 00
March 22, 1907. As stated on page 913 of the minutes of the Board of Estimate and Apportionment.	3% bonds, redeemable 1908	December 23, 1907	$4,386 00	
	3% bonds, redeemable 1908	December 30, 1907	17,781 00	22,167 00
Amount of appropriations made by the Board of Estimate and Apportionment, applied to the requirements of the Public Service Commission for the First District from July 1, 1907, to December 31, 1907				$387,831 00

GENERAL FUND.

III. DISBURSEMENTS.

Statement showing the amount of Disbursements made under the direction of the Public Service Commission for the First District, from July 1, 1907, to December 31, 1907.

a. EXECUTIVE.

General Office Disbursements.

Compensation of the Public Service Commissioners, Counsel and Secretary (chargeable to the state fund)	$44,892 45	
Compensation of Rapid Transit Railroad Commissioners (to June 30, 1907)		$12,241 64
Salaries		22,433 29
Office and telephone rentals		21,044 76
Stationery, printing and supplies		3,939 19
Postage		329 25
Furniture and fixtures		12,912 11
Telegraph services		24 03
Maps, plans, prints and photo. supplies		41 00
Disbursements (traveling and petty expenses)		341 32
Stenography and typewriting		87 70
Books and periodicals		473 55
Sundry contingent expenses		2,214 07
Total amount of executive disbursements	$44,892 45	
Total amount of general office disbursements		$76,081 91

b. LEGAL DEPARTMENT.

Salaries		$10,964 44
Stationery, printing and supplies		40 78
Furniture and fixtures		1,796 54
Disbursements (traveling and petty expenses)		131 16
Advertising		127 20
Real estate search and appraisal		860 83
Books and periodicals		234 00
Investigations and hearings, viz.:		
Railroad investigation, including special counsel	$22,017 68	
Gas litigation, including special counsel	6,038 80	
		28,056 48
Sundry contingent expenses		2 50
Total legal department disbursements		$42,213 93

c. BUREAU OF GAS AND ELECTRICITY.

Salaries	$9,091 97
Stationery, printing and supplies	516 20
Postage	13 00
Instruments and supplies	55 20
Disbursements (traveling and petty expenses)	117 27
Stenography and typewriting	15 00
Contingent sundry expenses	79 50
Total bureau of gas and electricity disbursements	$9,888 14

d. ENGINEERING DEPARTMENT.

	Bureau of Transportation.	Bureau of Subway Construction
Salaries	$12,123 80	$248,073 01
Stationery, printing and supplies	55 14	2,318 66
Furniture and fixtures	160 75	829 70
Lighting	.....	6 58
Janitor service	.....	296 00
Instruments and supplies	25 00	2,093 00
Maps, plans, prints and photographic supplies	.....	1,420 39
Disbursements (traveling and petty expenses)	606 38	1,915 70
Postage	.....	27 25
Inspections, tests and analysis	.....	431 71
Borings and soundings	.....	322 67
Architectural services and disbursements	.....	320 50
Consulting electrical engineer's services	.....	725 00
Sundry contingent expenses	.....	533 95
Total bureau of transportation disbursements.	$12,971 07	
Total bureau of subway construction disb'm'ts.	.....	$259,314 12
Total engineering department disbursements.	.....	$272,285 19

MANHATTAN-THE BRONX CONSTRUCTION FUND.

IV. REQUISITIONS AND APPROPRIATIONS.

Statement of Requisitions made upon the Board of Estimate and Apportionment, for the authorization for the issue of Corporate Stock of The City of New York and the Appropriations made by the Board of Estimate and Apportionment, the proceeds thereof to be applied to the requirements of the Manhattan-The Bronx Construction Fund under provision of the contract with *John B. McDonald, Contractor,* dated February 21, 1900, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Manhattan-The Bronx Rapid Transit Railroad, from July 1, 1907, to December 31, 1907.

No.	Authorized.	Amount.	Appropriation.	Amount.
9.	August 16, 1907. As stated on page 195 of the minutes of the Public Service Commission for the First District, viz.:— Extra work—Construction under Broadway, from W. Ninety-sixth street to a point between 101st and 102d streets, in the Borough of Manhattan, New York city.	$850,000 00	October 4, 1907. As stated on page 3217 of the minutes of the Board of Estimate and Apportionment	$850,000 00
10.	October 21, 1907. As stated on page 511 of the minutes of the Public Service Commission for the First District, viz.: Extra work—Construction of outlet chambers, fan houses and vault light chambers	600,000 00	November 8, 1907. As stated on page 3789 of the minutes of the Board of Estimate and Apportionment	600,000 00
	Total amount of requisitions made upon the Board of Estimate and Apportionment for the requirements of the Public Service Commission for the First District in the construction of the Manhattan-The Bronx Rapid Transit Railroad, from July 1, 1907, to December 31, 1907	$1,450,000 00	Total amount of appropriations made by the Board of Estimate and Apportionment, the proceeds to be applied to the construction of the Manhattan-The Bronx Rapid Transit Railroad, from July 1, 1907, to December 31, 1907	$1,450,000 00

VII. REAL ESTATE.

Statements showing the Requisitions made upon the Public Service Commission for the First District and the payments authorized under the direction of the Public Service Commission to be made for Real Estate acquired, for and in behalf of The City of New York, under provision of the contract with *John B. McDonald, Contractor*, dated February 21, 1900, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Manhattan-The Bronx Rapid Transit Railroad, from July 1, 1907, to December 31, 1907.

DISBURSEMENTS.	Amount.	Total.
CLERICAL SERVICE.		
Compensation of the clerk of the commissioners of appraisal appointed by the Appellate Division of the Supreme Court, First Judicial District, relative to lands situated, viz.:		
Easements—On Westchester avenue, Southern boulevard and Boston road, in the Borough of The Bronx, New York city	$400 00	
Stenographic services rendered the commissioners of appraisal appointed by the Appellate Division of the Supreme Court, First Judicial District, relative to lands situated, viz.:		
Easements—On the westerly side of Fourth avenue, between Eighth and Ninth streets, in the Borough of Manhattan, New York city	54 20	
		$454 20
Total amount paid for real estate acquired under provision of the contract with John B. McDonald, Contractor, dated February 21, 1900, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Manhattan-The Bronx Rapid Transit Railroad, from July 1, 1907, to December 31, 1907	.....	$454 20

BROOKLYN-MANHATTAN CONSTRUCTION FUND.

VIII. CORPORATE STOCK.

Statement showing the issues of Corporate Stock of The City of New York, from July 1, 1907, to December 31, 1907, the proceeds thereof to be applied to the construction of the Brooklyn-Manhattan Rapid Transit Railroad.

No.	Date of sale.	Issue.	Interest. rate.	Maturity.	Issue of Stock.						
					Date.	Rate of premium.	Amount issued.	Total.	Amount of premium.	Total.	Amount of proceeds. credited.
13.....	1907. Aug. 12	$500 00	4%	1957. May 1	1907. Aug. 15	.....	$500 00	$500 00	.....	.....	$500 00
14.....	Aug. 12	270,000 00	4%	May 1	Oct. 28	.....	$270,000 00	270,000 00	.....	.....	270,000 00
15.....	Aug. 12	43,000 00	4%	May 1	Oct. 29	.....	$43,000 00	43,000 00	.....	.....	43,000 00
Total amount of corporate stock issued.....								$313,500 00			
Total amount of premium on the issue of corporate stock.....											
Total amount of proceeds applicable to the construction of the Brooklyn-Manhattan Rapid Transit Railroad of the city of New York, from July 1, 1907, to December 31, 1907.....											$313,500 00

BROOKLYN-MANHATTAN CONSTRUCTION FUND.

IX. DISBURSEMENTS.

Statement showing the Requisitions made upon the Public Service Commission for the First District, and the payments authorized under direction of the Public Service Commission to be made to *Rapid Transit Subway Construction Company, Contractor*, for work done and materials furnished under contract dated July 21, 1902, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad of The City of New York, from July 1, 1907, to December 31, 1907.

Requisition.	To date.	Payments authorized.		To whom.	Amount.
	1907.	1907.			
45	To June 30	July 26	As stated on page 101 of the minutes of the Public Service Commission, 1st district	Rapid Transit Subway Construction Co.	$7,337 25
46	To July 31	August 29	As stated on page 245 of said minutes	Rapid Transit Subway Construction Co.	11,383 89
47	To August 31	October 9	As stated on page 458 of said minutes	Rapid Transit Subway Construction Co.	13,888 01
Total amount paid to Rapid Transit Subway Construction Company, for work done and materials furnished under contract dated July 21, 1902, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad, from July 1, 1907, to December 31, 1907					$32,609 15

DISBURSEMENTS — *Continued.*

X. EXTRA WORK.

Statement showing the Requisitions made upon the Public Service Commission for the First District, and the payments authorized under the direction of the Public Service Commission, to be made to *Rapid Transit Subway Construction Company, Contractor,* for extra work done and materials furnished under contract dated July 21, 1902, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad of The City of New York, from July 1, 1907, to December 31, 1907.

Requisition.	To date.	Payments authorized.		To whom.	Amount.
	1907.	1907.			
21	To June 30	July 26	As stated on page 102 of the minutes of the Public Service Commission, 1st district	Rapid Transit Subway Construction Co.	$46,890 75
22	To July 31	August 29	As stated on page 246 of said minutes	Rapid Transit Subway Construction Co.	54,463 10
23	To August 31	October 9	As stated on page 457 of said minutes	Rapid Transit Subway Construction Co.	55,414 20
Total amount paid to Rapid Transit Subway Construction Company, contractor, for extra work done and materials furnished under contract dated July 21, 1902, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad, from July 1, 1907, to December 31, 1907					$156,768 05

DISBURSEMENTS — *Continued.*

XI. REAL ESTATE.

Statement showing the Requisitions made upon the Public Service Commission for the First District and the payments authorized under the direction of the Public Service Commission to be made for Real Estate acquired, for and in behalf of The City of New York, under provision of the contract with *Rapid Transit Subway Construction Company, Contractor,* dated July 21, 1902, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad, from July 1, 1907, to December 31, 1907.

DISBURSEMENTS.	Amount.	Total.
ADVERTISING.		
Advertising notices of the filing for confirmation, reports of the commissioners of appraisal appointed by the Appellate Division of the Supreme Court, Second Judicial District, relative to lands situated, viz.:		
Estate in fee—Triangular parcel of land, bounded by Flatbush, Fourth and Atlantic avenues, in the Borough of Brooklyn, New York city	.....	$130 56
CLERICAL SERVICE.		
Compensation of the clerk of the commissioners of appraisal appointed by the Appellate Division of the Supreme Court, Second Judicial District, relative to lands situated, viz.:		
Easements—Lands under Joralemon and other streets, in the Borough of Brooklyn, New York city	$400 00	
Stenographic services rendered the commissioners of appraisal appointed by the Appellate Division of the Supreme Court, Second Judicial District, relative to lands situated, viz.:		
Easements—Lands under Joralemon and other streets, in the Borough of Brooklyn, New York city	885 00	
Easements—Lands at Joralemon and Furman streets, in the Borough of Brooklyn, New York city	465 40	
		$1,750 40
REAL ESTATE APPRAISAL.		
Fee for the appraisal of property, viz.:		
Estate in fee—Triangular parcel of land, bound by Flatbush, Fourth and Atlantic avenues, in the Borough of Brooklyn, New York city	.....	150 00
Total amount paid for real estate acquired under provision of the contract with *Rapid Transit Subway Construction Company, Contractor,* dated July 21, 1902, and the agreements amendatory thereof and supplemental thereto, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad, from July 1, 1907, to December 31, 1907	.....	$2,030 96

DISBURSEMENTS — *Continued.*

XII. INTEREST ON CORPORATE STOCK.

Statement showing the payments made under the direction of the City Comptroller, for interest due on the Corporate Stock issued by The City of New York, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad, from July 1, 1907, to December 31, 1907.

No.	FOR WHAT.	Due.	Amount.
9	The payment of interest due on the corporate stock issued by the city of New York, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad	Nov. 1, 1907	$42,516 53
	Total amount in interest paid on the corporate stock issued by the city of New York, for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad, from July 1, 1907, to December 31, 1907	.....	$42,516 53

BROOKLYN-MANHATTAN LOOP LINES (MANHATTAN SECTIONS) CONSTRUCTION FUND.

XIII. REQUISITIONS AND APPROPRIATIONS.

Statement of Requisitions made upon the Board of Estimate and Apportionment, for the authorization for the issue of Corporate Stock of The City of New York and the Appropriations made by the Board of Estimate and Apportionment, the proceeds thereof to be applied to the requirements of the Brooklyn-Manhattan Loop Lines (Manhattan Sections) Construction Funds from July 1, 1907, to December 31, 1907.

No.	Authorized.	Amount.	Appropriation.	Amount.
6.	October 16, 1907. As stated on page 497 of the minutes of the Public Service Commission for the First District, viz.: Real estate and interest thereon	$1,000,000 00	December 20, 1907. As stated on page 4241 of the minutes of the Board of Estimate and Apportionment, viz.: Authorization made on account of requisition, dated October 16, 1907, to provide means for the purchase of property known as 402 Broome street, Borough of Manhattan, New York city, in connection with the construction of route 9-0-4 of the Brooklyn-Manhattan loop lines (Manhattan sections)	$40,000 00
	Total amount of requisitions made upon the Board of Estimate and Apportionment for the requirements of the Public Service Commission for the First District in the construction of the Brooklyn-Manhattan loop lines (Manhattan sections), from July 1, 1907, to December 31, 1907	$1,000,000 00	Amount of appropriations made by the Board of Estimate and Apportionment, the proceeds to be applied to the construction of the Brooklyn-Manhattan loop lines (Manhattan sections), from July 1, 1907, to December 31, 1907	$40,000 00

BROOKLYN-MANHATTAN LOOP LINES (MANHATTAN SECTIONS) CONSTRUCTION FUNDS.

XIV. CORPORATE STOCK.

Statement showing the issue of Corporate Stock of The City of New York, from July 1, 1907, to December 31, 1907, the proceeds thereof to be applied to the construction of the Brooklyn-Manhattan Loop Lines (Manhattan Sections).

SECTION.	No.	Date of sale.	Issue.	Interest rate.	Maturity.	ISSUE OF STOCK.					Total.
						Date.	Rate of premium.	Amount issued.	Amount of premium.	Amount of proceeds credited.	
		1907.			1957.	1907.					
9-0-1, Sub-title No. 3.	1	Aug. 12	$15,000	4%	May 1	Nov. 15	.....	$15,000	.....	$15,000	
	2	Aug. 12	31,000	4%	May 1	Nov. 30	.....	31,000	.....	31,000	
											$46,000
9-0-2, Sub-title No. 1.	1	Aug. 12	40,000	4%	May 1	Sept. 16	.....	40,000	.....	$40,000	
	2	Aug. 12	33,000	4%	May 1	Oct. 15	.....	33,000	.....	33,000	
	3	Aug. 12	42,000	4%	May 1	Nov. 15	.....	42,000	.....	42,000	
	4	Aug. 12	48,000	4%	May 1	Dec. 9	.....	48,000	.....	48,000	
											163,000
9-0-3, Sub-title No. 2.	1	Aug. 12	13,000	4%	May 1	Oct. 15	.....	13,000	.....	$13,000	
	2	Aug. 12	22,000	4%	May 1	Nov. 15	.....	22,000	.....	22,000	
	3	Aug. 12	56,000	4%	May 1	Dec. 9	.....	56,000	.....	56,000	
											91,000
9-0-4, Sub-title No. 4.	1	Aug. 12	1,000	4%	May 1	Oct. 10	.....	1,000	.....	$1,000	
	2	Aug. 12	1,000	4%	May 1	Nov. 15	.....	1,000	.....	1,000	
	3	Aug. 12	13,000	4%	May 1	Nov. 30	.....	13,000	.....	13,000	
											15,000
9-0-5, Sub-title No. 5.	1	Aug. 12	35,000	4%	May 1	Oct. 10	.....	35,000	.....	$35,000	
	2	Aug. 12	28,000	4%	May 1	Nov. 15	.....	28,000	.....	28,000	
	3	Aug. 12	32,000	4%	May 1	Nov. 30	.....	32,000	.....	32,000	
											95,000
Total amount of corporate stock issued.....								$410,000			
Total amount of premium on issue of corporate stock.....											
Total amount of proceeds applicable to the construction of the Brooklyn-Manhattan Loop Lines (Manhattan sections), from July 1, 1907, to December 31, 1907.....											$410,000

BROOKLYN-MANHATTAN LOOP LINES (MANHATTAN SECTIONS) CONSTRUCTION FUNDS.

XV. DISBURSEMENTS.

Statement showing the Requisitions made upon the Public Service Commission for the First District, and the payments authorized under the direction of the Public Service Commission to be made to the various *Contractors*, for work done and materials furnished under the different contracts for the construction of the Brooklyn-Manhattan Loop Lines (Manhattan Sections), from July 1, 1907, to December 31, 1907.

SECTION.	Requisition No.	To date.	Payments authorized.	To contractor.	Amount.	Total.
		1907.	1907.			
9–0–1, Sub-title No. 3.	1	Sept. 30	Nov. 1 As stated on page 598 of the minutes of the Public Service Commission (First District)	Bradley Contracting Compy.	$14,089 50	
	2	Oct. 31	Nov. 13 As stated on page 661 of said minutes	Bradley Contracting Compy.	30,458 25	
	3	Nov. 30	Dec. 27 As stated in said minutes	Bradley Contracting Compy.	23,364 45	
						$67,912 20
9–0–2, Sub-title No. 1.	1	July 31	Sept. 4 As stated on page 271 of said minutes	The Degnon Contracting Co.	$39,330 00	
	2	Aug. 31	Oct. 4 As stated on page 427 of said minutes	The Degnon Contracting Co	33,221 70	
	3	Sept. 30	Nov. 1 As stated on page 602 of said minutes	The Degnon Contracting Co.	41,177 70	
	4	Oct. 31	Nov. 22 As stated on page 715 of said minutes	The Degnon Contracting Co.	48,326 18	
	5	Nov. 30	Dec. 20 As stated in said minutes	The Degnon Contracting Co.	98,475 30	
						260,530 88
9–0–3, Sub-title No. 2.	1	Aug. 31	Oct. 4 As stated on page 425 of said minutes	Cranford Company	$12,071 70	
	2	Sept. 30	Nov. 1 As stated on page 603 of said minutes	Cranford Company	21,159 90	
	3	Oct. 31	Nov. 22 As stated on page 717 of said minutes	Cranford Company	56,375 55	
	4	Nov. 30	Dec. 20 As stated in said minutes	Cranford Company	42,979 50	
						132,586 65
9–0–4, Sub-title No. 4.	1	Aug. 31	Sept. 13 As stated on page 314 of said minutes	Bradley Contracting Compy.	$389 02	
	2	Sept. 30	Nov. 1 As stated on page 599 of said minutes	Bradley Contracting Compy.	789 75	
	3	Oct. 31	Nov. 13 As stated on page 662 of said minutes	Bradley Contracting Compy.	12,168 00	
	4	Nov. 30	Dec. 27 As stated in said minutes	Bradley Contracting Compy.	24,230 70	
						37,577 47
9–0–5, Sub-title No. 5.	1	July 31	Sept. 13 As stated on page 315 of said minutes	Bradley Contracting Compy.	$8,605 35	
	2	Aug. 31	Sept. 13 As stated on page 316 of said minutes	Bradley Contracting Compy.	22,237 42	
	3	Sept. 30	Nov. 1 As stated on page 600 of said minutes	Bradley Contracting Compy.	27,326 02	
	4	Oct. 31	Nov. 13 As stated on page 663 of said minutes	Bradley Contracting Compy.	31,389 30	
						89,558 09
Total amount paid to the various contractors for work done and materials furnished under the different contracts for the construction of the Brooklyn-Manhattan Loop Lines (Manhattan sections), from July 1, 1907, to December 31, 1907						$588,165 29

DISBURSEMENTS — *Continued.*

XVI. INTEREST ON CORPORATE STOCK.

Statement showing the payments made under the direction of the City Comptroller, for interest due on the Corporate Stock issued by The City of New York, for the construction of the Brooklyn-Manhattan Loop Lines (Manhattan Sections), from July 1, 1907, to December 31, 1907.

No.	FOR WHAT.	Due.	Amount.
1	*The payment of interest due on the corporate stock issued by the city of New York for the construction of the Brooklyn–Manhattan Loop Lines (Manhattan sections)	Nov. 1, 1907	$675 56
	Total amount in interest paid on the corporate stock issued by the city of New York for the construction of the Brooklyn–Manhattan Loop Lines (Manhattan sections), from July 1, 1907, to December 31, 1907		$675 56

*Charged to " Interest on City Debt " account, City Comptroller's office. Not applied to the Brooklyn–Manhattan Loop Lines (Manhattan sections) construction funds account

BROOKLYN-MANHATTAN LOOP LINES (MANHATTAN SECTIONS) CONSTRUCTION FUNDS.

XV. DISBURSEMENTS.

Statement showing the Requisitions made upon the Public Service Commission for the First District, and the payments authorized under the direction of the Public Service Commission to be made to the various *Contractors*, for work done and materials furnished under the different contracts for the construction of the Brooklyn-Manhattan Loop Lines (Manhattan Sections), from July 1, 1907, to December 31, 1907.

SECTION.	Requisition No.	To date.	Payments authorized.	To contractor.	Amount.	Total.
		1907.	1907.			
9–0–1, Sub-title No. 3.	1	Sept. 30	Nov. 1 As stated on page 598 of the minutes of the Public Service Commission (First District)	Bradley Contracting Compy.	$14,089 50	
	2	Oct. 31	Nov. 13 As stated on page 661 of said minutes.	Bradley Contracting Compy.	30,458 25	
	3	Nov. 30	Dec. 27 As stated in said minutes	Bradley Contracting Compy.	23,364 45	
						$67,912 20
9–0–2, Sub-title No. 1.	1	July 31	Sept. 4 As stated on page 271 of said minutes.	The Degnon Contracting Co.	$39,330 00	
	2	Aug. 31	Oct. 4 As stated on page 427 of said minutes.	The Degnon Contracting Co	33,221 70	
	3	Sept. 30	Nov. 1 As stated on page 602 of said minutes.	The Degnon Contracting Co.	41,177 70	
	4	Oct. 31	Nov. 22 As stated on page 715 of said minutes.	The Degnon Contracting Co.	48,326 18	
	5	Nov. 30	Dec. 20 As stated in said minutes	The Degnon Contracting Co.	98,475 30	
						260,530 88
9–0–3, Sub-title No. 2.	1	Aug. 31	Oct. 4 As stated on page 425 of said minutes.	Cranford Company	$12,071 70	
	2	Sept. 30	Nov. 1 As stated on page 603 of said minutes.	Cranford Company	21,159 90	
	3	Oct. 31	Nov. 22 As stated on page 717 of said minutes.	Cranford Company	56,375 55	
	4	Nov. 30	Dec. 20 As stated in said minutes	Cranford Company	42,979 50	
						132,586 65
9–0–4, Sub-title No. 4.	1	Aug. 31	Sept. 13 As stated on page 314 of said minutes.	Bradley Contracting Compy.	$389 02	
	2	Sept. 30	Nov. 1 As stated on page 599 of said minutes.	Bradley Contracting Compy.	789 75	
	3	Oct. 31	Nov. 13 As stated on page 662 of said minutes.	Bradley Contracting Compy.	12,168 00	
	4	Nov. 30	Dec. 27 As stated in said minutes	Bradley Contracting Compy.	24,230 70	
						37,577 47
9–0–5, Sub-title No. 5.	1	July 31	Sept. 13 As stated on page 315 of said minutes.	Bradley Contracting Compy.	$8,605 35	
	2	Aug. 31	Sept. 13 As stated on page 316 of said minutes.	Bradley Contracting Compy.	22,237 42	
	3	Sept. 30	Nov. 1 As stated on page 600 of said minutes.	Bradley Contracting Compy.	27,326 02	
	4	Oct. 31	Nov. 13 As stated on page 663 of said minutes.	Bradley Contracting Compy.	31,389 30	
						89,558 09
Total amount paid to the various contractors for work done and materials furnished under the different contracts for the construction of the Brooklyn-Manhattan Loop Lines (Manhattan sections), from July 1, 1907, to December 31, 1907						$588,165 29

DISBURSEMENTS — *Continued.*

XVI. INTEREST ON CORPORATE STOCK.

Statement showing the payments made under the direction of the City Comptroller, for interest due on the Corporate Stock issued by The City of New York, for the construction of the Brooklyn-Manhattan Loop Lines (Manhattan Sections), from July 1, 1907, to December 31, 1907.

No.	FOR WHAT.	Due.	Amount.
1	*The payment of interest due on the corporate stock issued by the city of New York for the construction of the Brooklyn–Manhattan Loop Lines (Manhattan sections)	Nov. 1, 1907	$675 56
	Total amount in interest paid on the corporate stock issued by the city of New York for the construction of the Brooklyn–Manhattan Loop Lines (Manhattan sections), from July 1, 1907, to December 31, 1907		$675 56

*Charged to "Interest on City Debt" account, City Comptroller's office. Not applied to the Brooklyn–Manhattan Loop Lines (Manhattan sections) construction funds account

a. GENERAL FUND.

XVII. BALANCES.

Statement showing the balance of the General Fund December 31, 1907.

Year.	Appropriations.			Disbursements.	Excess disbursements chargeable to the current issue of special revenue bonds.	Surplus applicable with the current appropriation.
		EXCESS DISBURSEMENTS JUNE 30, 1907.				
1907	.....	Excess disbursements of the general fund to June 30, 1907, chargeable to the current issue of special revenue bonds		$62,790 36	$62,790 36	.....
		APPROPRIATIONS.				
1907	$387,831 00	Appropriations made by the Board of Estimate and Apportionment applied to the purposes of the Public Service Commission for the First District, from July 1, 1907, to December 31, 1907	.....	.....	.....	.....
		DISBURSEMENTS JULY 1, 1907, TO DECEMBER 31, 1907.				
1907	.....	General office	$76,081 91			
		Legal department	42,213 93			
		Bureau of gas and electricity	9,888 14			
		Engineering department, viz.:				
		Bureau of transportation	$12,971 07			
		Bureau of subway construction	259,314 12			
			272,285 19			
				400,469 17	12,638 17	.....
		EXCESS DISBURSEMENTS TO DECEMBER 31, 1907.				
1907	75,428 53	Excess disbursements of the general fund, December 31, 1907, chargeable to the current issue of special revenue bonds	.....	.....	.....	$75,428 53
	$463,259 53			$463,259 53	$75,428 53	$75,428 53

b. MANHATTAN-THE BRONX CONSTRUCTION FUND.

BALANCES.

Statement showing the balance of the Manhattan-The Bronx Construction Fund, December 31, 1907.

Year.	Amount of proceeds of corporate stock issued.		Disbursements.	Excess disbursements chargeable to the current stock issue.	Surplus applicable with the proceeds of the current stock issue.
		EXCESS DISBURSEMENTS TO JUNE 30, 1907.			
1907	.....	Excess disbursements of the Manhattan-The Bronx construction fund, June 30, 1907, chargeable to the proceeds of the current issue of corporate stock.	$343,552 78	$343,552 78	.....
		CORPORATE STOCK TO DECEMBER 31, 1907.			
1907	$683,000 00	Amount of proceeds of corporate stock issued by the city of New York for the construction and operation of the Manhattan-The Bronx Rapid Transit Railroad, from July 1, 1907, to December 31, 1907.....	.....	.....	.....
		DISBURSEMENTS JULY 1, 1907, TO DECEMBER 31, 1907.			
1907	.....	Disbursements, viz., Manhattan-The Bronx Rapid Transit Railroad:			
		For extra work done and materials furnished..... $482,225 47			
		For real estate..... 454 20			
			482,679 67	.....	$200,320 33
		EXCESS DISBURSEMENTS DECEMBER 31, 1907.			
1907	143,232 45	Excess disbursements of the Manhattan-The Bronx construction fund, December 31, 1907, chargeable to the proceeds of the current issue of corporate stock.....	.....	.....	143,232 45
	$826,232 45		$826,232 45	$343,552 78	$343,552 78

c. BROOKLYN-MANHATTAN CONSTRUCTION FUND

BALANCES.

Statement showing the balance of the Brooklyn-Manhattan Construction Fund, December 31, 1907.

Year.	Amount of proceeds of corporate stock issued.		Disbursements.	Excess disbursements chargeable to the current stock issue.	Surplus applicable with the proceeds of the current stock issue.
		EXCESS DISBURSEMENTS TO JUNE 30, 1907.			
1907	.....	Excess disbursements of the Brooklyn-Manhattan construction fund, June 30, 1907, chargeable to the proceeds of the current issue of corporate stock	$316,320 48	$316,320 48	.....
		CORPORATE STOCK TO DECEMBER 31, 1907.			
1907	$313,500 00	Amount of proceeds of corporate stock issued by the city of New York for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad, from July 1, 1907, to December 31, 1907	.....	.....	.....
		DISBURSEMENTS JULY 1, 1907, TO DECEMBER 31, 1907.			
1907	.....	Disbursements, viz., Brooklyn-Manhattan Rapid Transit Railroad:			
		For work done and materials furnished $32,609 15			
		For extra work done and materials furnished 156,768 05			
		For real estate 2,030 96			
		For interest on the corporate stock 42,516 53			
			233,924 69	.....	$79,575 31
		EXCESS DISBURSEMENTS DECEMBER 31, 1907.			
1907	236,745 17	Excess disbursements of the Brooklyn-Manhattan construction fund, December 31, 1907, chargeable to the proceeds of the current issue of corporate stock	.....	.....	236,745 17
	$550,245 17		$550,245 17	$316,320 48	$316,320 48

d. BROOKLYN-MANHATTAN LOOP LINES (MANHATTAN SECTIONS) CONSTRUCTION FUNDS.

BALANCES.

Statement showing the balances of the Brooklyn-Manhattan Loop Lines (Manhattan Sections) Construction Funds, Dec. 31, 1907.

Year.	Amount of proceeds of corporate stock issued.		Disbursements.	Excess disbursements chargeable to the current stock issue.	Surplus applicable with the proceeds of the current stock issue.
		Amount of proceeds of corporate stock issued by the city of New York, and the disbursements made pursuant to the various contracts for the construction of the Brooklyn-Manhattan loop lines (Manhattan sections), from July 1, 1907, to December 31, 1907.			
		Section 9-0-1, sub-title No. 3. Centre street, from Pearl street to Park Row, New York city.			
1907	$46,000 00	Amount of corporate stock issued.			
		Disbursements—For work done and materials furnished	$67,912 20	$21,912 20	.....
		Section 9-0-2, sub-title No. 1. Centre street, from Pearl street to Canal street, New York city.			
1907	163,000 00	Amount of corporate stock issued.			
		Disbursements—For work done and materials furnished	260,530 88	97,530 88	.....
		Section 9-0-3, sub-title No. 2. Centre street from Canal street to Broome street, New York city.			
1907	91,000 00	Amount of corporate stock issued.			
		Disbursements—For work done and materials furnished	132,586 65	41,586 65	.....
		Section 9-0-4, sub-title No. 4. New extension of Delancey street, from Centre street to the Bowery, New York city.			
1907	15,000 00	Amount of corporate stock issued.			
		Disbursements—For work done and materials furnished	37,577 47	22,577 47	.....
		Section 9-0-5, sub-title No. 5. Delancey street, between the Bowery and Norfolk street, New York city.			
1907	95,000 00	Amount of corporate stock issued.			
		Disbursements—For work done and materials furnished	89,558 09	.....	$5,441 91
		EXCESS DISBURSEMENTS, DECEMBER 31, 1907.			
1907	178,165 29	Excess disbursements of the Brooklyn-Manhattan loop lines (Manhattan sections) construction funds, December 31, 1907, chargeable to the proceeds of the current issue of corporate stock	.....	.....	178,165 29
	$588,165 29		$588,165 29	$183,607 20	$183,607 20

MANHATTAN-THE BRONX CONTRACT.

XVIII. SECURITY.

a. Statement of the Security deposited by *John B. McDonald, Contractor, and Interborough Rapid Transit Company*, under provision of the contract of February 21, 1900, and the agreements amendatory thereof and supplemental thereto, for the construction, maintenance and operation of the Manhattan-The Bronx Rapid Transit Railroad, remaining in the custody of The City of New York, December 31, 1907.

Bond — For construction and equipment, deposited with the City Comptroller, February 21, 1900 ..... $5,000,000.

SURETIES.

The Rapid Transit Subway Construction Company of New York, $4,000,000.

The United States Fidelity and Guaranty Company of Maryland, $250,000.

The Empire State Surety Company of New York, $250,000.

The American Surety Company of New York, $250,000.

The National Surety Company of New York, $250,000.

Bond — (continuing). For rental and also for construction deposited (substituted) with the City Comptroller, January 14, 1904 ..... $1,000,000.

SURETIES.

Fidelity and Deposit Company of Maryland, $500,000.

United States Fidelity and Guaranty Company of Maryland, $500,000.

Bonds of the sub-contractors for construction, assigned to The City of New York as additional security by John B. McDonald, Contractor, and deposited with the Rapid Transit Board, aggregating ..... $3,378,250.

CITY LIEN ON EQUIPMENT.

The City shall also have a first lien upon the equipment of the Railroad, as further security for the faithful performance by the Contractor of the covenants, conditions and agreements of the contract of February 21, 1900, and the agreements amendatory thereof and supplemental thereto. Such lien shall arise immediately upon the acquisition by the Contractor of any part of the Equipment for use on or in connection with the said Railroad or any part of it, or intended for such use, whether or not such equipment be set up or delivered upon or at the railway.

BROOKLYN-MANHATTAN CONTRACT.

SECURITY.

b. Statement of the Security deposited by *Rapid Transit Subway Construction Company, Contractor,* under provision of the contract of July 21, 1902, and the agreements amendatory thereof and supplemental thereto, for the construction, maintenance and operation of the Brooklyn-Manhattan Rapid Transit Railroad, remaining in the custody of The City of New York, December 31, 1907.

Amount in cash — For construction pursuant to the contract, deposited with the City Chamberlain September 11, 1902.... $1,000,000.

Bond — (continuing). For rental and also for construction deposited (substituted) with the City Comptroller February 10, 1905 .. .. $1,000,000.

SURETIES.

United States Fidelity and Guaranty Company of Maryland, $250,000.

Fidelity and Deposit Company of Maryland, $250,000.

The National Surety Company of New York, $250,000.

The Aetna Indemnity Company of Connecticut, $100,000.

The Empire State Surety Company of New York, $150,000.

Bond of the sub-contractors for construction, assigned to The City of New York as additional security by Rapid Transit Subway Construction Company, Contractor, and deposited with the Rapid Transit Board, aggregating..... $650,000.

CITY LIEN ON EQUIPMENT.

"The City shall also have a first lien upon the equipment of the Railroad as further security for the faithful performance by the Contractor of the covenants, conditions and agreements of the contract of July 21, 1902, and the agreements amendatory thereof and supplemental thereto. Such lien shall arise immediately upon the acquisition by the Contractor of any part of the equipment for use on or in connection with the said railroad or any part of it, or intended for such use, whether or not such equipment be set up or delivered upon or at the railway."

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c. BROOKLYN-MANHATTAN LOOP LINES (MANHATTAN SECTIONS) CONTRACTS.

SECURITY.

Statement of the security deposited under the provisions of the various contracts for the construction of the Brooklyn-Manhattan Loop Lines (Manhattan Sections) remaining in the custody of The City of New York, December 31, 1907.

Section 9-0-1 Centre street from Pearl street to Park Row.

Bradley Contracting Company, Contractor.

Bond — For construction, deposited with the City Comptroller.. $160,000

SURETIES.

Title Guaranty and Surety Company of Scranton, Pennsylvania, **$55,000.**

Empire State Surety Company of New York, **$55,000.**

People's Surety Company, New York **$50,000.**

Section 9-0-2 Centre street from Pearl street to Canal street.

The Degnon Contracting Company, Contractor.

Bond — For construction, deposited with the City Comptroller.. $300,000.

SURETIES.

Bankers' Surety Company, Cleveland, Ohio, **$55,000.**

United Surety Company, Baltimore, Md., **$60,000.**

People's Surety Company, New York, **$50,000.**

Aetna Indemnity Company, Hartford, Conn., **$60,000.**

Title Guaranty and Surety Company, Scranton, Pa., **$75,000.**

Section 9-0-3 Centre street from Canal street to Broome street.

Cranford Company, Contractor.

Bond — For construction, deposited with the City Comptroller.. $150,000.

SURETIES.

Empire State Surety Company of New York, **$50,000.**

Title Guaranty and Surety Company, Scranton, Pa., **$50,000.**

People's Surety Company, New York, **$50,000.**

Section 9-0-4 new extension of Delancey street from Centre street to the Bowery.

Bradley Contracting Company, Contractor.

Bond — For construction, deposited with the City Comptroller.. $150,000.

SURETIES.

Title Guaranty and Surety Company of Scranton, Pennsylvania, **$50,000.**

Empire State Surety Company of New York, **$50,000.**

People's Surety Company, New York, **$50,000.**

Section 9-0-5 Delancey street between the Bowery and Norfolk street.

Bradley Contracting Company, Contractor.

Bond — For construction, deposited with the City Comptroller.. $180,000.

SURETIES.

Title Guaranty and Surety Company of Scranton, Pennsylvania, **$65,000.**

Empire State Surety Company of New York, **$65,000.**

People's Surety Company, New York, **$50,000.**

XIX. RAPID TRANSIT RAILROAD RENTAL.

a. MANHATTAN-THE BRONX.

Statement showing the payments made under the direction of the City Comptroller for interest due on the Corporate Stock issued by The City of New York for the construction and operation of the Manhattan-The Bronx Rapid Transit Railroad, and the Rental received by the City Comptroller from Interborough Rapid Transit Company under a lease by The City of New York of the Manhattan-The Bronx Rapid Transit Railroad constructed under the contract with *John B. McDonald, Contractor*, dated February 21, 1900, and the agreements amendatory thereof and supplemental thereto assigned to the Interborough Rapid Transit Company, from July 1, 1907, to December 31, 1907.

RENTAL.						INTEREST ON CORPORATE STOCK.				
Due.	Date received.	From	Payments to the sinking fund.	For interest on corporate stock.	Total.	No.	For what.	Due.	Amount.	Total.
1907.		Amount in rental received by the City Comptroller from Interborough Rapid Transit Company to June 30, 1907	$810,376 57	$3,295,688 36	$4,106,064 93		Amount in interest paid by the City Comptroller to June 30, 1907			$3,099,239 00
July 1	July 30	Interborough Rapid Transit Company		$371,800 72		15	The payments of interest due on the corporate stock issued by the city of New York for the construction and operation of the Manhattan-The Bronx Rapid Transit Railroad	1907		
Oct. 1	Oct. 30	Interborough Rapid Transit Company		369,289 00				Nov. 1	$800,001 59	
Nov. 1		Interborough Rapid Transit Company					Amount in interest paid by the City Comptroller on the corporate stock issued by the city of New York for the construction and operation of the Manhattan-The Bronx Rapid Transit Railroad to December 31, 1907			800,001 59
		Total amounts in rental received by the City Comptroller from Interborough Rapid Transit Company under a lease by the city of New York of the Manhattan-The Bronx Rapid Transit Railroad to December 31, 1907		$741,089 72	741,089 72					$3,899,240 59
					$4,847,154 65					

RAPID TRANSIT RAILROAD RENTAL.

b. BROOKLYN-MANHATTAN.

Statement showing the payments made under the direction of the City Comptroller for interest due on the Corporate Stock issued by The City of New York for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad, and the Rental received by the City Comptroller from Interborough Rapid Transit Company under a lease by The City of New York of the Brooklyn-Manhattan Rapid Transit Railroad constructed under the contract with *Rapid Transit Subway Construction Company, Contractor*, dated July 21, 1902, and the agreements amendatory thereof and supplemental thereto assigned to the Interborough Rapid Transit Company, from July 1, 1907, to December 31, 1907.

RENTAL.						INTEREST ON CORPORATE STOCK.				
Due.	Date received.	From	Payments to the sinking fund.	For interest on corporate stock.	Total.	No.	For what.	Due.	Amount.	Total.
		Amount in rental received by the City Comptroller from Interborough Rapid Transit Company to June 30, 1907.....	$5,255 29	$33,199 97	$38,455 26		Amount in interest paid by the City Comptroller to June 30, 1907.....			
1907. July 1	1907. July 30	Interborough Rapid Transit Company.....	.....	$4,747 94		9	*The payments of interest due on the corporate stock issued by the city of New York for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad.....	1907		
Aug. 1	.....	Interborough Rapid Transit Company.....	.....	.....				Nov. 1	.....	.....
Oct. 1	Oct. 30	Interborough Rapid Transit Company.....	.....	4,748 05			Amount in interest paid by the City Comptroller on the corporate stock issued by the city of New York for the construction and operation of the Brooklyn-Manhattan Rapid Transit Railroad to December 31, 1907.....			
		Total amounts in rental received by the City Comptroller from Interborough Rapid Transit Company under a lease by the city of New York of the Brooklyn-Manhattan Rapid Transit Railroad to December 31, 1907.....	.....	$9,495 99	9,495 99					
					$47,951 25					.....

* The amount of interest on the corporate stock issued, due November 1, 1907, was applied to the "Interest on Corporate Stock" account, Brooklyn-Manhattan construction fund disbursements.

XX. TRUST FUNDS ACCOUNT.

Statement relative to funds collected by the Public Service Commission for the First District, New York, and paid into the City Treasury to the credit of the General Fund.

a. MISCELLANEOUS SUPPLIES FUND.

July 1, 1907, to December 31, 1907 — Total proceeds of the sales of contracts, drawings, reports, and records, etc., of the Public Service Commission for the First District.....		$497 00

b. GAS METER FUND.

July 1, 1907, to December 31, 1907 — Net amount collected from various complainants for fees charged for the testing of gas meters by the Public Service Commission for the First District.....	$163 40	
July 1, 1907, to December 31, 1907 — Total amount collected from the various gas companies in payment for tests of gas meters by the Public Service Commission for the First District.....	331 50	
		494 90
Total amount paid into the city treasury to the credit of the general fund, from July 1, 1907, to December 31, 1907....		$991 90

XXI. RECAPITULATION.

GENERAL FUND, 1894–1907.

a. REQUISITIONS AND APPROPRIATIONS.

Total amount of requisitions made upon the Board of Estimate and Apportionment, viz.:			Total amount of appropriations made by the Board of Estimate and Apportionment, viz.:	
For the requirements of the Board of Rapid Transit Railroad Commissioners during the period of:			For the requirements of the Board of Rapid Transit Railroad Commissioners, during the period of:	
1894. Amount of requisitions		$5,000 00	1894. Amount of appropriations	$5,000 00
1895. Amount of requisitions	$89,434 75		1895. Amount of appropriations	53,795 88
Aggregate appropriation made by the Board of Estimate and Apportionment in excess of the amount of the original requisitions	1,816 31			
		91,251 06		
1896. Amount of requisitions		66,947 93	1896. Amount of appropriations	102,135 60
1897. Amount of requisitions	$94,482 21		1897. Amount of appropriations	66,009 59
Aggregate appropriation made by the Board of Estimate and Apportionment reduced to suffice the purposes of the original requisitions	14,433 04			
		80,049 17		
1898. Amount of requisitions	$42,943 37		1898. Amount of appropriations	53,380 91
Aggregate appropriation made by the Board of Estimate and Apportionment reduced to suffice the purposes of the original requisitions	5,869 55			
		37,073 82		
1899. Amount of requisitions		27,625 33	1899. Amount of appropriations	27,625 33
1900. Amount of requisitions		246,393 28	1900. Amount of appropriations	246,393 28
1901. Amount of requisitions		423,521 60	1901. Amount of appropriations	423,521 60
1902. Amount of requisitions		613,500 00	1902. Amount of appropriations	613,500 00
1903. Amount of requisitions	$572,000 00		1903. Amount of appropriations	542,000 00
Re-appropriation. No bonds to be issued	30,000 00			
		542,000 00		
1904. Amount of requisitions		576,000 00	1904. Amount of appropriations	576,000 00
1905. Amount of requisitions		640,605 00	1905. Amount of appropriations	640,605 00
1906. Amount of requisitions		731,160 00	1906. Amount of appropriations	731,160 00
*1907. Amount of requisitions		853,167 00	*1907. Amount of appropriations	853,167 00
Total		$4,934,294 19	Total	$4,934,294 19
For the requirements of the Public Service Commission for the First District during the period of:			For the requirements of the Public Service Commission for the First District during the period of:	
†1907. Amount of requisitions		37,000 00	†1907. Amount of requisitions	37,000 00
Grand total		$4,971,294 19	Grand total	$4,971,294 19

* For the six months ending June 30, 1907.
† For the six months ending December 31, 1907.

GENERAL FUND, 1894–1907.

b. DISBURSEMENTS.

YEAR.	Administrative, and general office.	Engineering.	Legal.	Amount.	Total.
Total amount of disbursements made under the direction of the Board of Rapid Transit Railroad Commissioners during the period of—.					
1894. Amount of disbursements	$2,929 10	$1,271 34	$28 30	$4,228 74	
1895. Amount of disbursements	6,048 49	26,250 29	25,688 13	57,986 91	
1896. Amount of disbursements	35,572 34	17,028 82	31,457 53	84,058 69	
1897. Amount of disbursements	5,230 06	21,395 86	38,925 73	65,551 65	
1898. Amount of disbursements	4,521 15	17,930 31	29,519 13	51,970 59	
1899. Amount of disbursements	2,826 94	3,698 00	20,551 30	27,076 24	
1900. Amount of disbursements	53,866 33	161,047 23	27,356 19	242,269 75	
1901. Amount of disbursements	39,023 86	348,258 30	31,861 62	419,143 78	
1902. Amount of disbursements	45,576 10	458,389 79	33,547 26	537,513 15	
1903. Amount of disbursements	45,719 42	520,664 27	24,332 55	590,716 24	
1904. Amount of disbursements	57,965 11	530,936 37	27,446 87	616,348 35	
1905. Amount of disbursements	48,945 59	513,535 00	48,977 91	611,458 50	
1906. Amount of disbursements	45,384 68	586,503 74	119,807 99	751,696 41	
*1907. Amount of disbursements	68,798 39	300,244 99	91,691 17	460,734 55	
Total	$462,407 56	$3,507,154 31	$551,191 68	$4,520,753 55	$4,520,753 55
	General office.	Engineering.	Legal.	Gas and electricity.	
Total amount of disbursements made under the direction of the Public Service Commission for the First District during the period of—					
†1907. Amount of disbursements	$76,081 91	$272,285 19	$42,213 93	$9,888 14	400,469 17
Grand total of General Fund disbursements, from 1894 to 1907, inclusive					$4,921,222 72

* For the six months ending June 30, 1907.
† For the six months ending December 31, 1907.

MANHATTAN-THE BRONX CONSTRUCTION FUNDS, 1894–1907.

c. REQUISITIONS AND APPROPRIATIONS.

Total amount of the requisitions made upon the Board of Estimate and Apportionment for the requirements of the Board of Rapid Transit Railroad Commissioners during the period:			
1900. Amount of the requisitions	Construction	$35,000,000 00	
	Terminals	1,000,000 00	
	Real estate	500,000 00	
			$36,500,000 00
1901. Amount of the requisitions			
1902. Amount of the requisitions			
1903. Amount of the requisitions, extra work			3,000,000 00
1904. Amount of the requisitions	Real estate	$1,500,000 00	
	Terminals	750,000 00	
	Extra work and for ducts	1,500,000 00	
			3,750,000 00
1905. Amount of the requisitions	Interest on corporate stock		2,965,392 65
1906. Amount of the requisitions	Extra work, Van Cortlandt Park extension		675,000 00
*1907. Amount of the requisitions	Extra work at R. T. station at 149th St. and Third avenue, Borough of The Bronx	$15,000 00	
	Interest on corporate stock	729,773 63	
			744,773 63
Total			$47,635,166 28
Total amount of the requisitions made upon the Board of Estimate and Apportionment for the requirements of the Public Service Commission for the First District during the period:			
†1907. Amount of the requisitions.	Extra work		1,450,000 00
Grand total			$49,085,166 28

* For the six months ending June 30, 1907.
† For the six months ending December 31, 1907.

Total amount of the appropriations made by the Board of Estimate and Apportionment for the requirements of the Board of Rapid Transit Railroad Commissioners during the period:	
1900. Amount of the appropriations	$36,500,000 00
1901. Amount of the appropriations	
1902. Amount of the appropriations	
1903. Amount of the appropriations	3,000,000 00
1904. Amount of the appropriations	3,750,000 00
1905. Amount of the appropriations	2,965,392 65
1906. Amount of the appropriations	675,000 00
*1907. Amount of the appropriations	744,773 63
Total	$47,635,166 28
Total amount of the appropriations made by the Board of Estimate and Apportionment for the requirements of the Public Service Commission for the First District during the period:	
†1907. Amount of the appropriation	$1,450,000 00
Grand total	$49,085,166 28

BROOKLYN-MANHATTAN CONSTRUCTION FUND, 1894–1907.

d. REQUISITIONS AND APPROPRIATIONS.

Total amount of the requisitions made upon the Board of Estimate and Apportionment for the requirements of the Board of Rapid Transit Railroad Commissioners during the period:		
1902. Amount of the requisitions { Construction	$2,000,000 00	
Terminals and real estate	1,000,000 00	$3,000,000 00
1903. Amount of the requisitions		.....
1904. Amount of the requisitions		.....
1905. Amount of the requisitions, extra work		1,620,000 00
1906. Amount of the requisitions		.....
*1907. Amount of the requisitions		.....
Total		$4,620,000 00
Total amount of the requisitions made upon the Board of Estimate and Apportionment for the requirements of the Public Service Commission for the First District during the period:		
†1907. Amount of the requisitions		.....
Grand total		$4,620,000 00

* For the six months ending June 30, 1907.
† For the six months ending December 31, 1907.

Total amount of the appropriations made by the Board of Estimate and Apportionment for the requirements of the Board of Rapid Transit Railroad Commissioners during the period:	
1902. Amount of the appropriations	$3,000,000 00
1903. Amount of the appropriations	.....
1904. Amount of the appropriations	.....
1905. Amount of the appropriations	1,620,000 00
1906. Amount of the appropriations	.....
*1907. Amount of the appropriations	.....
Total	$4,620,000 00
Total amount of the appropriations made by the Board of Estimate and Apportionment for the requirements of the Public Service Commission for the First District during the period:	
†1907. Amount of the appropriations	.....
Grand total	$4,620,000 00

BROOKLYN-MANHATTAN LOOP LINES (MANHATTAN SECTIONS) CONSTRUCTION FUNDS, 1894–1907.

e. REQUISITIONS AND APPROPRIATIONS.

Total amount of requisitions made upon the Board of Estimate and Apportionment for the requirements of the Board of Rapid Transit Railroad Commissioners during the period of:		Total amount of appropriations made by the Board of Estimate and Apportionment for the purposes of the Board of Rapid Transit Railroad Commissioners during the period of:	
*1907. Amount of requisition — Section 9–0–2 (Centre street from Pearl street to Canal street.)	$3,035,000 00	*1907. Amount of appropriation	$3,035,000 00
*1907. Amount of requisition — Section 9–0–3 (Centre street from Canal street to Broome street.)	2,210,000 00	*1907. Amount of appropriation	2,210,000 00
*1907. Amount of requisition — Section 9–0–1 (Centre street from Pearl street to Park row.)	1,003,828 00	*1907. Amount of appropriation	1,003,828 00
*1907. Amount of requisition — Section 9–0–4 (New extension of Delancey street from Centre street to the Bowery.)	1,547,342 00	*1907. Amount of appropriation	1,547,342 00
*1907. Amount of requisition — Section 9–0–5 (Delancey street between the Bowery and Norfolk street.)	1,298,436 00	*1907. Amount of appropriation	1,298,436 00
Total	$9,094,606 00	Total	$9,094,606 00
Total amount of the requisitions made upon the Board of Estimate and Apportionment for the requirements of the Public Service Commission for the First District during the period:		Total amount of the appropriations made by the Board of Estimate and Apportionment for the requirements of the Public Service Commission for the First District during the period:	
†1907. Amount of requisition	1,000,000 00	†1907. Amount of appropriation	$40,000 00
Grand total	$10,094,606 00	Grand total	$9,134,606 00

* For the six months ending June 30, 1907.
† For the six months ending December 31, 1907.

f. CORPORATE STOCK, 1894–1907.

(1) MANHATTAN-THE BRONX CONSTRUCTION FUND.

Total amount of proceeds credited of the corporate stock issued by The City of New York for the construction of the Manhattan-The Bronx Rapid Transit Railroad during the period of:—

			Proceeds.
1900.	Amount of stock issued	$1,000,000 00	
	" " premium	105,400 00	
			$1,105,400 00
1901.	Amount of stock issued	$11,000,000 00	
	" " premium	635,361 46	
			11,635,361 46
1902.	Amount of stock issued	$12,500,000 00	
	" " premium	803,663 70	
			13,303,663 70
1903.	Amount of stock issued	$11,865,000 00	
	" " premium	237,487 72	
			12,102,487 72
1904.	Amount of stock issued	$5,885,000 00	
	" " premium	82,938 37	
			5,967,938 37
1905.	Amount of stock issued	$2,300,000 00	
	" " premium	16,391 10	
			2,316,391 10
1906.	Amount of stock issued		
1907.*	Amount of stock issued		
	Total		$46,431,242 35
1907.†	Amount of stock issued		683,000 00
	Grand total		$47,114,242 35

(2) BROOKLYN-MANHATTAN CONSTRUCTION FUND.

Total amount of proceeds credited of the corporate stock issued by The City of New York for the construction of the Brooklyn-Manhattan Rapid Transit Railroad during the period of:—

			Proceeds.
1903.	Amount of stock issued	$301,000 00	
	" " premium	715 29	
			$301,715 29
1904.	Amount of stock issued	$1,065,000 00	
	" " premium	15,359 13	
			1,080,359 13
1905.	Amount of stock issued	$200,000 00	
	" " premium	1,425 32	
			201,425 32

* For the six months ending June 30, 1907.

† For the six months ending December 31, 1907.

1906.	Amount of stock issued.....	$750,000 00	
	" " premium	4,435 00	
			$754,435 00
1907.*	Amount of stock issued.....	$36,000 00	
	" " premium	.....	
			36,000 00
	Total		$2,373,934 74
1907.†	Amount of stock issued.....	$313,500 00	
	" " premium	.....	
			313,500 00
	Grand total		$2,687,434 74

(3) BROOKLYN-MANHATTAN LOOP LINES (MANHATTAN SECTIONS) CONSTRUCTION FUNDS.

Total amount of proceeds credited of the corporate stock issued by The City of New York for the construction of the Brooklyn-Manhattan Loop Lines (Manhattan Sections):

Section 9-0-1, *Sub-title No.* 3.

Centre street from Pearl street to Park Row, New York City.

1907.†	Amount of stock issued.....	$46,000 00	
	" " premium	.....	
			$46,000 00

Section 9-0-2, *Sub-title No.* 1.

Centre street from Pearl street to Canal street, New York City.

1907.†	Amount of stock issued.....	$163,000 00	
	" " premium	.....	
			163,000 00

Section 9-0-3, *Sub-title No.* 2.

Centre street from Canal street to Broome street, New York City.

1907.†	Amount of stock issued.....	$91,000 00	
	" " premium	.....	
			91,000 00

Section 9-0-4, *Sub-title No.* 4.

New extension of Delancey street from Centre street to the Bowery, New York City.

1907.†	Amount of stock issued.....	$15,000 00	
	" " premium	.....	
			15,000 00

* For the six months ending June 30, 1907.

† For the six months ending December 31, 1907.

Section 9-0-5, *Sub-title No.* 5.

Delancey street between the Bowery and Norfolk street, New York City.			
1907*	Amount of stock issued.....	$95,000 00	
	" " premium	.....	
			$95,000 00
	Grand Total		$410,000 00

*For the six months ending December 31, 1907.

g. CONSTRUCTION FUNDS, 1894–1907.

DISBURSEMENTS.

(1) MANHATTAN-THE BRONX CONSTRUCTION FUND.

YEAR.	Work and materials.	Extra work and materials.	Terminals.	Real estate.	Interest on corporate stock.	Total.
Total amount of disbursements made in the construction of the Manhattan-The Bronx Rapid Transit Railroad during the period:—						
1900. Amount of disbursements	$1,685,000 00	.....	.....	.....	.....	$1,685,000 00
1901. Amount of disbursements	10,343,000 00	$162,000 00	.....	$9,515 45	$165,013 90	10,679,529 35
1902. Amount of disbursements	11,436,000 00	631,000 00	.....	141,391 72	547,031 41	12,755,423 13
1903. Amount of disbursements	6,930,000 00	2,563,021 47	$1,048,251 72	512,004 90	947,481 56	12,000,759 65
1904. Amount of disbursements	3,220,000 00	932,304 61	701,748 28	863,195 62	1,305,865 78	7,023,114 29
1905. Amount of disbursements	869,000 00	4,950 00		163,622 76	†729,092 68	1,766,665 44
1906. Amount of disbursements	.....	6,000 00	.....	75,709 58	*.....	81,709 58
**1907. Amount of disbursements	.....	759,211 96	.....	23,381 73	*.....	782,593 69
Total	$34,483,000 00	$5,058,488 04	$1,750,000 00	$1,788,821 76	$3,694,485 33	$46,774,795 13
††1907. Amount of disbursements	.....	482,225 47	.....	454 20	*.....	482,679 67
Grand total	$34,483,000 00	$5,540,713 51	$1,750,000 00	$1,789,275 96	$3,694,485 33	$47,257,474 80
Total amount of Manhattan-The Bronx construction fund disbursements from 1900 to 1907 inclusive						$47,257,474 80

*The total amount of interest on the corporate stock issued was applied to the "Rapid Transit Railroad, rental" account, Manhattan and the Bronx.
†An additional amount of interest on the corporate stock issued, due November 1, 1905, $775,982.75 was applied to the "Rapid Transit Railroad, rental" account, Manhattan and The Bronx.
**For the six months ending June 30, 1907.
††For the six months ending December 31, 1907.

CONSTRUCTION FUNDS, 1894–1907.— *Continued.*

DISBURSEMENTS — *Continued.*

(2) BROOKLYN-MANHATTAN CONSTRUCTION FUND.

YEAR.	Work and materials.	Extra work and materials.	Real estate.	Interest on corporate stock.	Total.
Total amount of disbursements made in the construction of the Brooklyn-Manhattan Rapid Transit Railroad during the period:—					
1903. Amount of disbursements	$202,457 06	.....	$706 80	$5 87	$203,169 73
1904. Amount of disbursements	620,425 62	.....	1,200 00	20,196 40	641,822 02
1905. Amount of disbursements	491,504 53	$82,895 00	2,450 80	50,533 59	627,383 92
1906. Amount of disbursements	314,718 97	457,081 87	9,176 76	63,975 56	844,953 16
*1907. Amount of disbursements	80,058 02	235,805 73	15,283 89	41,778 75	372,926 39
Total	$1,709,164 20	$775,782 60	$28,818 25	$176,490 17	$2,690,255 22
†1907. Amount of disbursements	32,609 15	156,768 05	2,030 96	42,516 53	233,924 69
Grand total	$1,741,773 35	$932,550 65	$30,849 21	$219,006 70	
Total amount of Brooklyn-Manhattan construction fund disbursements from 1902 to 1907, inclusive					$2,924,179 91

*For the six months ending June 30, 1907.
†For the six months ending December 31, 1907.

CONSTRUCTION FUNDS, 1894–1907 — *Continued.*

DISBURSEMENTS — *Continued.*

(3) BROOKLYN-MANHATTAN LOOP LINES (MANHATTAN SECTIONS).

YEAR.	Work and materials.	Pipe galleries.	Extra work and materials.	Real estate.	Interest on corporate stock.	Total.
Total amount of disbursements made in the construction of the Brooklyn-Manhattan Loop lines (Manhattan Sections) during the period of:—						
†1907. Amount of disbursements (Section 9–0–1, Centre street, from Pearl street to Park Row)	$67,912 20	.....	.....	.....	*.....	$67,912 20
†1907. Amount of disbursements (Section 9–0–2, Centre street, from Pearl street to Canal street).	260,530 88	.....	.....	.....	*.....	260,530 88
†1907. Amount of disbursements (Section 9–0–3, Centre street, from Canal street to Broome street)	132,586 65	.....	.....	.....	*.....	132,586 65
†1907. Amount of disbursements (Section 9–0–4, new extension of Delancey street, from Centre street to the Bowery)	37,577 47	.....	.....	.....	*.....	37,577 47
†1907. Amount of disbursements (Section 9–0–5, Delancey street, between the Bowery and Norfolk street)	89,558 09	.....	.....	.....	*.....	89,558 09
Grand total						$588,165 29

*Amount in interest paid on the corporate stock issued, due November 1, 1907 ($675.56) was charged to "interest on city debt" account, City Comptroller's office, and was not applied to the Brooklyn-Manhattan Loop lines (Manhattan Sections) construction fund account.

†For the six months ending December 31, 1907.

h. SUMMARY OF DISBURSEMENTS.

1894–1907.

	General fund disbursements.	Manhattan-The Bronx construction fund disbursements.	Brooklyn-Manhattan construction fund disbursements.	Brooklyn-Manhattan Loop Lines (Manhattan sections) construction fund disbursements.	Total.
Total amount disbursed by the Board of Rapid Transit Railroad Commissioners from June 18, 1894, to June 30, 1907	$4,520,753 55	$46,774,795 13	$2,690,255 22	.....	$53,985,803 90
Total amount disbursed by the Public Service Commission for the First District, New York, from July 1, 1907, to December 31, 1907	400,469 17	482,679 67	233,924 69	$588,165 29	1,705,238 82
	$4,921,222 72	$47,257,474 80	$2,924,179 91	$588,165 29	
Grand total					$55,691,042 72

Respectfully submitted,

H. A. D. HOLLMANN,

Auditor.

APPENDIX H.

CALENDAR OF MEETINGS OF THE COMMISSION AND OF HEARINGS HELD BY COMMISSIONERS.

APPENDIX H.

CALENDAR OF MEETINGS OF THE COMMISSION AND OF HEARINGS HELD BY COMMISSIONERS.

July 1. Meeting of Commission.
2. Meeting of Commission.
3. Meeting of Commission.
5. Meeting of Commission.
6. Meeting of Commission.
8. Meeting of Commission.
9. Meeting of Commission.
10. Meeting of Commission.
11. Meeting of Commission.
12. Meeting of Commission.
13. Meeting of Commission.
15. Meeting of Commission.
17. Meeting of Commission.
18. Meeting of Commission.
Hearing:
Removal of Eleventh Avenue tracks.
Commissioner Bassett,
Commissioner Eustis.
19. Meeting of Commission.
22. Meeting of Commission.
23. Meeting of Commission.
Hearing:
Removal of Eleventh Avenue tracks.
Commissioner Bassett,
Commissioner Eustis,
Commissioner McCarroll.
24. Meeting of Commission.
25. Meeting of Commission.
26. Meeting of Commission.
29. Meeting of Commission.
30. Meeting of Commission.
Hearings:
Form of contract for Fourth Avenue subway.
Commissioner McCarroll.
Equipment and practices of Coney Island & Brooklyn R. R. Company.
Chairman Willcox.
Commissioner Bassett,
Commissioner Eustis,
Commissioner Maltbie.

July 31. Meeting of Commission.

Aug. 1. Meeting of Commission.
Hearing:
Interborough-Metropolitan investigation.
Chairman Willcox.

2. Meeting of Commission.
Hearing:
Interborough-Metropolitan investigation.
Chairman Willcox.

5. Meeting of Commission.

6. Hearing:
Interborough-Metropolitan investigation.
Chairman Willcox.
Commissioner Eustis.

7. Meeting of Commission.
Hearings:
Interborough-Metropolitan investigation.
Chairman Willcox.
Re Application of New York & Queens County Electric Light & Power Co., for permission to issue bonds.
Commissioner McCarroll,
Commissioner Eustis.

8. Meeting of Commission.
Hearing:
Interborough-Metropolitan investigation.
Chairman Willcox.

9. Meeting of Commission.
Hearing:
Interborough-Metropolitan investigation.
Chairman Willcox.
Commissioner McCarroll,
Commissioner Eustis.

12. Meeting of Commission.

13. Meeting of Commission.

14. Hearing:
Brooklyn Rapid Transit investigation.
Commissioner McCarroll,
Commissioner Eustis.

15. Meeting of Commission.
Hearings:
Bronx Transit Matters.
Commissioner Eustis.
Brooklyn Rapid Transit investigation.
Commissioner McCarroll.

16. Meeting of Commission.

19. Meeting of Commission.

20. Meeting of Commission.
Hearing:
Interborough-Metropolitan investigation.
Chairman Willcox.

Aug. 21. Meeting of Commission.
Hearing:
Interborough-Metropolitan investigation.
Chairman Willcox.

22. Hearing:
Interborough-Metropolitan investigation.
Chairman Willcox.
Commissioner Eustis.

23. Meeting of Commission.

26. Meeting of Commission.

27. Meeting of Commission.

29. Meeting of Commission.

Sept. 4. Meeting of Commission.
Hearings:
Coney Island & Brooklyn R. R. Company, additional equipment.
Commissioner Bassett.
Interborough-Metropolitan investigation.
Chairman Willcox.

5. Meeting of Commission.
Hearings:
Application of Brooklyn Union Elevated R. R. Company, and Nassau Electric R. R. Company as to mortgages.
Commissioner Bassett.
Interborough-Metropolitan investigation.
Chairman Willcox.

6. Hearing:
Interborough-Metropolitan investigation.
Chairman Willcox.

9. Meeting of Commission.

10. Meeting of Commission.

11. Meeting of Commission.
Hearing:
Coney Island & Brooklyn R. R. Company, additional equipment.
Commissioner Bassett.

12. Meeting of Commission.
Hearing:
Application of Brooklyn Union Elevated R. R. Company, and Nassau Electric R. R. Company as to mortgages.
Commissioner McCarroll,
Commissioner Bassett.

13. Meeting of Commission.

14. Meeting of Commission.

16. Meeting of Commission.
Hearings:
New York City Railway Company, Inadequate service and equipment, Madison and Fourth Avenue Lines.
Commissioner Maltbie.
New York City Railway Company, Inadequate service and equipment, Broadway Lines. Commissioner Maltbie.

Sept. 17. Meeting of Commission.
Hearing:
Brooklyn Heights Railroad Company, removal of ashes.
Commissioner McCarroll.

18. Meeting of Commission.
Hearing:
Interborough-Metropolitan investigation.
Chairman Willcox.

19. Hearings:
Application of Brooklyn Union Elevated Railroad Company, and Nassau Electric Railroad Company, as to mortgages.
Commissioner Bassett.
Interborough Rapid Transit Company, 20 per cent. general increase of service.
Chairman Willcox.
Interborough-Metropolitan investigation.
Chairman Willcox.

20. Meeting of Commission.
Hearings:
Interborough Rapid Transit Company, service to West Farms, Second and Third Avenues.
Commissioner Eustis.
Interborough-Metropolitan investigation.
Chairman Willcox.

23. Meeting of Commission.
Hearings:
New York City Railway Company, service on Madison and Fourth Avenues.
Commissioner Maltbie.
New York City Railway Company, service on Broadway.
Commissioner Maltbie.

24. Meeting of Commission.
Hearings:
Interborough-Metropolitan investigation.
Chairman Willcox.
Brooklyn Heights Railroad Company, removal of ashes.
Commissioner McCarroll.

25. Meeting of Commission.

26. Hearings:
Application of Brooklyn Union Elevated Railroad Company, Nassau Electric Railroad Company, as to mortgages.
Commissioner Bassett.
New York City Railway Company, service on Madison and Fourth Avenues.
Commissioner Maltbie.
Interborough Rapid Transit Company, service to West Farms, on Second and Third Avenues.
Commissioner Eustis.

Sept. 26. Hearings — (Continued):
Interborough-Metropolitan investigation.
Chairman Willcox.

27. Meeting of Commission.
Hearings:
Union Railway Company, transfers to the New Rochelle express.
Commissioner Eustis.
Union Railway Company, general increase of service.
Commissioner Eustis.
Interborough Rapid Transit Company, 20 per cent. general increase of service.
Commissioner Eustis.

28. Hearing:
Interborough Rapid Transit Company, service to West Farms on Second and Third Avenues.
Commissioner Eustis.

30. Meeting of Commission.
Hearing:
Interborough Rapid Transit Company, 20 per cent. general increase of service.
Commissioner Eustis.

Oct. 1. Hearings:
Coney Island & Brooklyn R. R. Company, additional equipment.
Commissioner Bassett.
Interborough-Metropolitan investigation.
Chairman Willcox.

2. Meeting of Commission.
Hearings:
Interborough Rapid Transit Company, 20 per cent. general increase of service.
Commissioner Eustis.
Interborough-Metropolitan investigation.
Chairman Willcox.

Public hearing:
Re Increased transit facilities in Queens County.
Commissioner McCarroll,
Commissioner Bassett,
Commissioner Maltbie.

3. Meeting of Commission.
Hearing:
Interborough-Metropolitan investigation.
Chairman Willcox.

Public hearing:
Staten Island transit facilities.
Full Commission.

Oct. 4. Meeting of Commission.
Hearings:
Union Railway Company, transfers to the New Rochelle express.
Commissioner Eustis.
Union Railway Company, general increase of service.
Commissioner Eustis.

5. Meeting of Commission.

7. Meeting of Commission.
Hearings:
Forty-second Street, Manhattanville & St. Nicholas Avenue R. R. Company, service on Broadway.
Commissioner Maltbie.
Interborough-Metropolitan investigation.
Chairman Willcox.

8. Meeting of Commission.
Hearing:
Interborough-Metropolitan investigation.
Chairman Willcox.

9. Meeting of Commission.
Hearings:
New York City Railway Company, service on Madison and Fourth Avenues.
Commissioner Maltbie.
New York City Railway Company, service on Broadway.
Commissioner Maltbie.
Forty-second Street, Manhattanville & St. Nicholas Avenue R. R. Company, service on Broadway.
Commissioner Maltbie.
Interborough-Metropolitan investigation.
Chairman Willcox.

10. Hearings:
Richmond Light & Railroad Company, Fort Wadsworth curve.
Commissioner Bassett.
Interborough-Metropolitan investigation.
Chairman Willcox.

11. Meeting of commission.
Hearings:
Union Railway Company, transfers to New Rochelle express.
Commissioner Eustis.
Union Railway Company, general increase of service.
Commissioner Eustis.
Public hearing:
Re Queens County and Kings County, Broadway, Lafayette Street subway loop.
Full Commission.

12. Meeting of Commission.

Oct. 14. Hearings:
New York City Railway Company, service on Madison and Fourth Avenues.
Commissioner Maltbie.
Forty-second Street, Manhattanville & St. Nicholas Avenue service on Broadway.
Commissioner Maltbie.
New York City Railway Company, service on Broadway.
Commissioner Maltbie.

15. Meeting of Commission.
Hearings:
Union Railway Company, general increase of service.
Commissioner Eustis.
Interborough-Metropolitan investigation.
Chairman Willcox.

16. Meeting of Commission.
Hearing:
New York City Railway Company, service on Madison and Fourth Avenues.
Commissioner Maltbie.

17. Meeting of Commission.
Hearing:
Interborough-Metropolitan investigation.
Chairman Willcox.

18. Meeting of Commission.
Hearing:
Interborough-Metropolitan investigation.
Chairman Willcox.

21. Meeting of Commission.
Hearings:
Coney Island & Brooklyn R. R. Company, increase of service on Smith Street line.
Commissioner Bassett.
Coney Island & Brooklyn R. R. Company, additional equipment and appliances.
Commissioner Bassett.

22. Meeting of Commission.
Public hearing:
Fourteenth Street, Jamaica Avenue, Queens Borough subway.
Commissioner Bassett.

23. Meeting of Commission.
Hearing:
Brooklyn Heights Railroad Company, Lexington Avenue, 20 per cent. general increase of service.
Commissioner Bassett.

25. Meeting of Commission.
Hearing:
Coney Island & Brooklyn R. R. Company, increase of service, Smith Street line.
Commissioner Bassett.

Oct. 26. Meeting of Commission.
28. Meeting of Commission.
30. Meeting of Commission.
Hearing:
Brooklyn Heights Railroad Company, Lexington Avenue increase of service.
Commissioner Bassett.

Nov. 1. Meeting of Commission.
Hearing:
Coney Island & Brooklyn R. R. Company, increase of service, Smith Street line.
Commissioner Bassett.
4. Meeting of Commission.
6. Meeting of Commission.
Hearings:
Brooklyn Heights Railroad Company, Brooklyn Union Elevated Railroad Company, bridge superintendent.
Commissioner Bassett.
Brooklyn Heights Railroad Company, Lexington Avenue increase of service.
Commissioner Bassett.
8. Meeting of Commission.
Hearing:
Coney Island & Brooklyn R. R. Company, increase of service, Smith Street line.
Commissioner Bassett.
11. Meeting of Commission.
Public hearing:
Amendments to the Rapid Transit Act.
Full Commission.
12. Meeting of Commission.
Hearings:
Interborough Rapid Transit Company, violation of the eight-hour law.
Commissioner Eustis.
Interborough-Metropolitan investigation.
Chairman Willcox.
13. Meeting of Commission.
Hearings:
Brooklyn Heights Railroad Company; Brooklyn Union Elevated R. R. Company, bridge superintendent.
Commissioner Bassett.
Interborough-Metropolitan investigation.
Chairman Willcox.
14. Meeting of Commission.
Hearing:
Interborough-Metropolitan investigation.
Chairman Willcox.
Public hearing:
Belmont tunnel.
Full Commission.

Nov. 15. Meeting of Commission.
Hearings:
Union Railway Company, Interborough Rapid Transit Company, transfers from subway at 149th street to Westchester.
Commissioner Eustis.
Interborough Rapid Transit Company, violation of eight-hour law.
Commissioner Eustis.

18. Meeting of Commission.

19. Meeting of Commission.

20. Meeting of Commission.
Hearing:
Interborough-Metropolitan investigation.
Commissioner McCarroll, Commissioner Bassett.

21. Hearings:
Interborough-Metropolitan investigation.
Commissioner McCarroll.
Richmond Light & R. R. Company, Staten Island Midland R. R. Company, service and equipment.
Commissioner McCarroll.

22. Meeting of Commission.
Hearings:
Interborough-Metropolitan investigation.
Chairman Willcox.
Staten Island Railway Company, Staten Island Rapid Transit Railway Company, service and equipment.
Commissioner McCarroll.
Coney Island & Brooklyn R. R. Company, increase of service Smith Street line.
Commissioner Bassett.

23. Hearings:
Union Railway Company, transfers from the subway at One Hundred and Forty-ninth Street to Westchester.
Commissioner Eustis.
Brooklyn Union Elevated R. R. Company, enlargement at Cypress Hills station.
Commissioner Bassett.
Interborough Rapid Transit Company, violation of eight-hour law.
Commissioner Eustis.

25. Meeting of Commission.
Hearings:
Coney Island & Brooklyn R. R. Company, increase of service, Smith Street line.
Commissioner Bassett.
Coney Island & Brooklyn R. R. Company, equipment of open car bodies.
Commissioner Bassett.

Nov. 25. Meeting of Commission — (Continued):
Public hearing:
Flatbush Avenue Extension, Brooklyn subway.
Full Commission.

26. Hearings:
Interborough-Metropolitan investigation.
Commissioner McCarroll.
Staten Island Railway Company, Staten Island Rapid Transit Railway Company, service and equipment.
Commissioner McCarroll.
Brooklyn Union Elevated Railroad Company, gates at Lutheran cemetery.
Commissioner Bassett.

27. Meeting of Commission.
Hearings:
Interborough-Metropolitan investigation.
Commissioner McCarroll.
Brooklyn Union Elevated Railroad Company, 150 additional station signs.
Commissioner Bassett.
Richmond Light & Railroad Company, Staten Island Midland Railroad Company, service and equipment.
Commissioner McCarroll.

29. Meeting of Commission.

30. Meeting of Commission.
Hearing:
Brooklyn Union Elevated Railroad Company, 150 additional station signs.
Commissioner Bassett.

Dec. 2. Meeting of Commission.
Hearings:
Interborough-Metropolitan investigation.
Commissioner McCarroll.
Brooklyn Union Elevated Railroad Company, gates at Lutheran cemetery.
Commissioner Bassett.
Brooklyn Union Elevated Railroad Company, enlargement of Cypress Hills station.
Commissioner Bassett.
Long Island Railroad Company, local service, East New York.
Commissioner McCarroll.

3. Hearings:
Interborough-Metropolitan investigation.
Commissioner McCarroll.
New York City Interborough Railway Company, inadequate shelter, Aqueduct Avenue line.
Commissioner Eustis.
Staten Island Railway Company, Staten Island Rapid Transit Railway Company, service and equipment.
Commissioner Eustis.

Dec. 4. Meeting of Commission.
Hearings:
Interborough-Metropolitan investigation.
Commissioner McCarroll.
Richmond Light & Railroad Company, Staten Island Midland Railroad Company, service and equipment.
Commissioner Eustis.
Coney Island & Brooklyn Railroad Company, defective equipment, Smith Street line.
Commissioner Bassett.

6. Meeting of Commission.

9. Meeting of Commission.
Hearings:
Brooklyn Union Elevated Railroad Company, increased service, Brooklyn bridge.
Commissioner Bassett.
Brooklyn Union Elevated Railroad Company, Lexington Avenue increase of service.
Commissioner Bassett.
Brooklyn Union Elevated Railroad Company, enlargement of Cypress Hills station.
Commissioner Bassett.

10. Hearings:
Staten Island Railway Company, Staten Island Rapid Transit Railway Company, service and equipment.
Commissioner McCarroll.
Coney Island & Brooklyn Railroad Company, defective equipment, Smith Street line.
Commissioner Bassett.
Gas and Electric Corporations, conference on classification of accounts.
Commissioner Maltbie.

11. Meeting of Commission.
Hearings:
Interborough Rapid Transit Company, additional subway service.
Chairman Willcox.
Richmond Light & Railroad Company, Staten Island Midland Railroad Company, service and equipment.
Commissioner McCarroll.
New York City Railway Company, Eighth Avenue increase of service.
Commissioner Maltbie.

12. Meeting of Commission.
Hearing:
Interborough Rapid Transit Company, block signals on local tracks of subway.
Chairman Willcox.

Dec. 13. Meeting of Commission.
Hearing:
Brooklyn Union Elevated Railroad Company, increase of service on Brooklyn bridge.
Commissioner Bassett.

16. Meeting of Commission.
Hearings:
Interborough Rapid Transit Company, additional subway service.
Commissioner Eustis.
Interborough Rapid Transit Company, service West Farms on Second and Third Avenues.
Commissioner Eustis.
Long Island Railroad Company, local service, East New York.
Commissioner McCarroll.

17. Meeting of Commission.
Hearing:
Interborough Rapid Transit Company, Ninth Avenue increase of service.
Commissioner Eustis.

18. Hearings:
Richmond Light & Railroad Company, Staten Island Midland Railroad Company, service and equipment.
Commissioner McCarroll.
Brooklyn Union Elevated Railroad Company, shelter at Thirty-sixth Street and Fifth Avenue, Brooklyn.
Commissioner Bassett.

19. Meeting of Commission.
Hearing:
New York Central & Hudson River Railroad Company, condition of Wakefield Station, Harlem Division.
Commissioner Eustis.

20. Meeting of Commission.
Hearings:
Interborough Rapid Transit Company, Third Avenue increase of service.
Commissioner Eustis.
Interborough Rapid Transit Company, block signals on local tracks of subway.
Chairman Willcox.
Interborough Rapid Transit Company, additional subway service.
Commissioner Eustis.
Interborough Rapid Transit Company, service to West Farms on Second and Third Avenues.
Commissioner Eustis.
Interborough Rapid Transit Company, Ninth Avenue increase of service.
Commissioner Eustis.
Richmond Light & Railroad Company, Staten Island Midland Railroad Company, service and equipment.
Commissioner McCarroll.

Dec. 20. Meeting of Commission — (Continued:
Hearings — (Continued):
Brooklyn Union Elevated Railroad Company, shelter at Thirty-sixth Street and Fifth Avenue, Brooklyn.
Commissioner Bassett.

21. Hearings:
New York City Railway Company, overhauling of cars.
Commissioner Maltbie.
Interborough Rapid Transit Company, Ninth Avenue increase of service.
Commissioner Eustis.

23. Meeting of Commission.
Hearings:
Interborough Rapid Transit Company, additional subway service.
Commissioner Eustis.
Forty-second Street, Manhattanville & St. Nicholas Avenue Railroad Company, increase of service south of One Hundred and Seventeenth Street.
Commissioner Maltbie.
Interborough Rapid Transit Company, Sixth Avenue increase of service.
Commissioner Eustis.
Interborough Rapid Transit Company, Second Avenue increase of service.
Commissioner Eustis.
New York City Interborough Railway Company, change of route on Kingsbridge Road.
Commissioner Eustis.

24. Hearings:
Interborough Rapid Transit Company, additional service Second and Third Avenues, elevated south of Chatham Square.
Commissioner Eustis.
Interborough Rapid Transit Company, Second Avenue Elevated, through trains to the Bronx.
Commissioner Eustis.
Interborough Rapid Transit Company, service to West Farms on Second and Third Avenues.
Commissioner Eustis.

26. Hearings:
Interborough Rapid Transit Company, Third Avenue, increase of service.
Commissioner Eustis.
Union Railway Company, transfers on Tremont and Burnside avenues.
Commissioner Eustis.

Dec. 27. Meeting of Commission.
Hearing:
Union Railway Company, transfers on Tremont and Burnside avenues.
Commissioner Eustis.

28. Hearing:
Forty-second street, Manhattanville & St. Nicholas Avenue. increase of service south of One Hundred and Seventeenth street.
Commissioner Maltbie.

30. Meeting of Commission.
Hearing:
Forty-second street, Manhattanville & St. Nicholas Avenue. increase of service south of One Hundred and Seventeenth street.
Commissioner Maltbie.

31. Meeting of Commission.
Hearings:
Coney Island & Brooklyn Railroad Company, equipment of open car bodies.
Commissioner Bassett.
Richmond Light & Railroad Company, Staten Island Midland Railroad Company, service and equipment.
Commissioner McCarroll.
Richmond Light & Railroad Company, Fort Wadsworth curve.
Commissioner McCarroll.
Commissioner Bassett.

APPENDIX I.

THE DEBT LIMIT IN ITS RELATION TO SUBWAY CONSTRUCTION.

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Early History. The Rapid Transit Act of 1891 did not contemplate municipal construction or ownership of rapid transit railways. By this act the Board of Rapid Transit Railroad Commissioners was authorized to adopt routes and plans and to sell the right to construct and operate upon such terms and for such period of time as the Board should deem advisable. The Board accordingly adopted a plan for an underground railway, and offered the franchise for sale to the highest bidder on December 29, 1892. No responsible bidder, however, was found willing to undertake the enterprise.

The Act of 1894 revised the Act of 1891 and reorganized the Rapid Transit Board. Under this act the alternative, viz., private or municipal ownership, was provided. The Board was required, after adopting routes and obtaining consents, to submit to the electors of the city at the next general election the question, "whether such railway or railways shall be constructed by the city and at public expense." If the vote should be against municipal construction, the Board should proceed to sell the franchise to a private corporation as was attempted under the Act of 1891. If the vote should be in favor of municipal construction, the Board should proceed therewith and the railroad when constructed should be and remain the absolute property of the city. In accordance with these terms the Board adopted plans and routes, and the question of private or municipal ownership was submitted to the voters on November 6, 1894. The result of the vote showed an overwhelming majority in favor of municipal ownership. The total vote was 184,035; affirmative, 132,647; negative, 42,916; defective ballots not counted, 399.

Supreme Court Disapproves. After an unsuccessful attempt to secure the consent of property holders along the route of the proposed railway, the Board made application for the substituted consent of the Supreme Court. The Court appointed commissioners to take testimony and report. The Commission reported in favor of the proposed plan, but the Court, on May 22, 1896, unanimously refused to confirm the report of its commissioners (Matter of Rapid Transit Commission, 5 App. Div. 290). The fact that the construction of the proposed railway might call for the issue of bonds in excess of the limit prescribed by the State Constitution was one of the most important reasons advanced by the Court in denying the application of the Board. Judge Rumsey explained the situation as follows:

> "It is plain that the city is not now in a situation to incur any such indebtedness. The assessed valuation of the city is something over $1,646,000,000. The actual debt now existing not including outstanding obligations, is something over $109,000,000. The limit of the con-

stitutional power to incur indebtedness is $164,600,000, leaving as an amount of indebtedness which the city may incur above its present indebtedness, $55,000,000. But we are bound to know that outstanding obligations have consumed a considerable portion of that amount. The bonds which the city must issue for obligations already incurred is upward of $19,000,000, which would leave only $36,000,000 that could be issued for this purpose. It is conceded on all hands that such a sum is entirely insufficient for the completion of this work. But if even that amount of bonds should be issued, thus bringing the indebtedness of the city up to its full limit, there is no doubt that the results might be quite serious. From that time on all expenses, however onerous, could be met only by taxation. In whatever public enterprise it should be necessary to engage from any unforeseen exigency which might arise, there would be no power to incur any indebtedness, however useful the existence of such a power might be. If it should be necessary to build schoolhouses, or to improve the water front, or to repave a street, each of these things could be done only upon condition that the money to pay for it should be at once raised by taxation. The serious consequences of such a condition of affairs can easily be understood. The actual necessity for leaving some margin of the power to incur indebtedness so that the city may provide for unforeseen emergencies must be conceded, and the propriety of undertaking any enterprise which would take away that power must be questioned seriously. But if, as is quite possible, the work should prove considerably more expensive than the estimates, the consequences would be much more serious. In that case, undoubtedly the work must stop, or it could be continued only by a resort to direct taxation to pay for it, which, added to the necessary taxation for the expense of the city government, might be exceedingly oppressive. If taxation should not be resorted to, the necessary result would be that the work would come to an end and probably the money already invested would be totally lost."

Revised Plans Approved. The Board of Rapid Transit Railroad Commissioners, in order to comply as far as possible with the decision of the Court in its former application, adopted plans for a subway, the estimated cost of which was about $20,000,000 less than the previous plan. On application to the Supreme Court for the approval of the route, commissioners were appointed as formerly to report on the question. The report of the commissioners was unanimous in favor of the plan of the Board, and this report was confirmed by the Appellate Division of the Supreme Court on December 17, 1897 (Matter of Rapid Transit Commission, 23 App. Div. 472). The question of the debt limit again received extended consideration, but the Court held that the question was not a proper one to be considered by it at that time. Judge Van Brunt in the prevailing opinion says:

"The report of the Supreme Court commissioners concedes, and the arguments of the counsel in favor of the application seem to admit, that if the total cost of the building of the proposed rapid transit road is to be deemed as incurred by the city at the time of the making of the contract, and there is added to this all the indebtedness of the city of New York then existing, whether funded or contingent, and its obligation to assume, on the first day of January of the coming year,

the indebtedness of the adjacent cities and counties, as provided by the new charter, the limit of indebtedness will be exceeded. Whether any of these elements can be excluded in determining as to the legality of any contract which the rapid transit commissioners might make or propose to make for the building of this road, presents serious questions of law which in my judgment ought not to be determined upon this application, for the reason that if the Court on this application should come to a conclusion upon these questions adverse to the legality of such proposed contract no review could be had of its determination, although involving only questions of law. * * * Upon the whole, although is it evident that beyond peradventure the entrance of the city into this enterprise will materially cripple its power to carry on other contemplated improvements (unless the money therefor is produced by immediate taxation), and although weighty questions of law must necessarily arise as to the legality of any contract which may be entered into for the construction of this road, I think that as the cost of construction is established with reasonable accuracy, and the ability to meet such cost is shown, provided the position of the Supreme Court commissioners and the rapid transit commissioners in respect to what constitutes the indebtedness of the city under the Constitution finally prevails, whatever may be our opinion upon those subjects, we should confirm the report of the Supreme Court commissioners and allow these legal questions to be settled in the future, particularly as, if it should be determined that the debt limit was exceeded by any contract which the commissioners might make, no liability could possibly be imposed upon the city."

Delay Due to Debt Limit. After the decision of the Supreme Court approving the plan for the subway, the Board proceeded to prepare a contract. The contract was completed and sent to the corporation counsel as required by the Rapid Transit Act, April 7, 1898. It was held by that official, without action, until September, 1899. Mayor Van Wyck, in his first message to the municipal assembly, January 1, 1898, expressed the opinion that no solution of the rapid transit problem could be worked out through the use of the city's credit, and suggested that relief must be obtained by the extension of the facilities of the elevated roads. The situation was summarized by the Rapid Transit Board as follows:

"The financial condition of the City of New York as it existed prior to the new charter had been exceedingly strong. Although the assessed value of the real estate within its borders had been moderate, compared with its actual value, the bonded debt was well within the ten per cent. limit imposed by the Constitution, and was so rapidly reduced through the operation of the sinking fund that there could be no doubt of the capacity of the city to issue such bonds as might be needed for the construction of the Rapid Transit Railroad, and for other needful purposes, without any abnormal increase in the assessed value of its property. The situation of the outlying territories, which were then consolidated with the old city, was, however, widely different. Not only was their real estate generally assessed at a much higher relative value than the real estate in the former City of New York, but their percentage of indebtedness to such assessed valuation was also much greater. One im-

mediate effect of the enactment of the new charter, which compelled the city to assume the aggregate indebtedness of all of the territory which it consolidated was, therefore, to reduce the debt incurring capacity of the new City to a very narrow limit.

"This difficulty proved to be but temporary. * * * But for the time being, and during the period immediately following the taking effect of the charter, the exact financial condition of the City was a matter of so much uncertainty as to give some plausible ground for the opinion that the City could not afford to construct the railroad and that the entire project ought to be abandoned." (Report of the Board of Rapid Transit Railroad Commissioners 1900–1901, pages 40–41.)

Perpetual Franchises Proposed. The Board in a memorial to the legislature in 1899 recommended that, in view of the city's financial condition, owing to consolidation, the Board be given authority in its discretion to offer the franchise for building and operating the proposed railway to private enterprise. This memorial is in part as follows:

"It is, however, the opinion of the Comptroller of the City of New York that on the first of January, 1898, the new City of New York was burdened — under its charter — with a debt which was not less than thirteen and a half million dollars in excess of ten per cent. of the assessed value of the real estate within the City limits.

"Obviously such a condition of affairs rendered it impossible during the past year to borrow the money required to construct the municipal railway as contemplated by the Act of Sale of 1894, and the Board of Rapid Transit Railroad Commissioners have been compelled to consider attentively what courses are now open to the City of New York to obtain the relief so long and so urgently needed.

"Three courses suggest themselves:—

"1. To wait until the borrowing capacity of the city is enlarged by a reduction of its present debt or by an increase of assessed valuations of real estate, or by both, as to enable it to borrow the necessary funds.

"2. To obtain legislative authority to issue bonds of the County of New York for the construction of the proposed railway.

"3. To obtain legislative authority to offer the franchise for building and operating the proposed railway to private enterprise. * * *

"The adoption of a plan for private ownership of a new rapid transit road would, undoubtedly, involve a complete reversal of the policy deliberately adopted little more than five years ago by a practically unanimous vote of the Legislature, and by an overwhelming majority of the voters of the former City of New York, and this ought not to be permitted except under the pressure of the most cogent reasons. * * *

"It is plain that such jurisdiction can only be found in the event of the public credit proving unavailable. That such will be the case is not as yet entirely certain, for the reasons above pointed out. The Board, therefore, recommend that if power is granted them to sell the franchise to construct the road such power shall be additional to their present powers and not a substitute for them. In this way the Board will be enabled to take advantage of varying conditions, as they may arise in the future. If the City authorities shall see their way to keep the debt sufficiently within the constitutional limitation, then the Board

will be in a position to authorize municipal construction; and, on the other hand, if municipal construction shall prove to be constitutionally impracticable within any reasonable time, the Board may be enabled to arrange for construction by private capital."

Public Disapproval. Immediately after the presentation of this memorial to the Legislature a proposition was received from men acting in behalf of the Metropolitan Street Railway Company, to the effect that if the Board would grant them a perpetual franchise they would construct the railroad on the general plans adopted by the Board and pay the City 5 per cent. of the gross receipts, provided they should first receive 5 per cent. net on the cost of construction. The Rapid Transit Commissioners had a bill introduced into the Legislature conferring on them the power to grant a perpetual franchise to a private corporation. Immediately on publishing the terms of the proposed bill it became manifest that the press and a large majority of the public were opposed to the granting of a perpetual franchise to any private corporation.

It was not until the fall of 1899, when the new real estate assessments had been confirmed and a constitutional amendment had been adopted which excluded some thirty millions of the debt of counties within the city from being counted within the 10 per cent. limitation, that the city became possessed of a borrowing power that enabled it to proceed with the construction of the subway. From the time that municipal ownership of subways was approved by popular vote, November 6, 1894, to the time of the approval of the contract for construction, October 11, 1899, almost five years had elapsed. For this long delay the constitutional debt limit was in large measure responsible.

New Lines Laid Out. The first subway was opened to traffic in October, 1904. Its success was immediate and remarkable. The subway idea, hitherto looked upon as an untried experiment, was now a demonstrated success. Rapid transit had been actually achieved. Its effect on the growth and prosperity of the communities served led to great advances in real estate values, and at once there came a strong and insistent demand from every section of the city for the building of subways. The Rapid Transit Board laid out some nineteen routes for subways. When these routes come before the Supreme Court for approval in 1906, the court approved them, with the proviso that the contracts be let within two years. It was estimated that the total cost of the proposed routes would be $300,000,000, with an additional $150,000,000 for equipment. Judge O'Brien, in delivering the opinion of the court, asserted that the city, with the existing constitutional limitation of its borrowing power, could not possibly undertake the construction of all the proposed routes, and that, if constructed, most of them would have to be constructed by private enterprise. (114 App. Div. 379.)

Cause of Present Delay. According to the Comptroller's statement of December 6, 1907, there was, on October 1, 1907, an estimated debt margin of $36,000,000. This margin will be added to during the year by (1) payments into the sinking fund; (2) direct redemption of debt from taxes and assessments; (3) increase in assessed valuation of real estate. The mayor's advisory commission estimates the annual payments into the sinking fund at from $10,000,000 to $12,000,000. The Comptroller, in a statement issued January 1, 1908, places the redemption of the city debt from taxes during

1908 at $9,438,869. The tentative assessments point to an increased borrowing capacity over 1907 of not less than $45,000,000. This amount will not be available until the assessments are confirmed in July, 1908.

History of the Debt Limit. In view of the obstructive role which the constitutional limitation upon municipal debt has played and is playing, and in view of the many urgent appeals for its revision, it is illuminating to examine carefully into the genesis of the constitutional restriction, to compare it with similar provisions in other States and to see if there is not a way by which, while retaining adequate safeguards, existing restrictions may be so modified as to admit of the construction by the city of needed subways.

During the period 1830 to 1850 the States generally pursued a policy of extensive internal improvement. They undertook the building of extensive works and granted subventions by way of subscription to stocks and bonds of private railway, canal, turnpike and banking enterprises. No adequate provision was made for payment of principal or interest, and altogether too sanguine a view was taken of the profits to be derived from these enterprises. This policy brought many States near to financial ruin. When the crisis came and the taxpayers came to realize that these immense debts must be paid for by increased tax rates, public opinion demanded that the Legislature thereafter be strictly limited in its power to incur debt. Accordingly provisions were incorporated in the Constitutions of many States limiting the power of the Legislature to incur debt and absolutely prohibiting the loaning of the State's credit to private corporations.

New York, like other States, heaped up debt without making any provisions for its payment, and with entirely inadequate provision for current revenue to meet the ordinary expenses of the government and the interest on the debt. The crisis came in 1842, and the Legislature suspended further expenditures for canal purposes, levied a direct tax and pledged its proceeds to the public creditors of the State. In later years, provisions restricting the power to incur debt were passed.

Municipal Debt. When the states could no longer grant aid to railroad, canal and turnpike enterprises, the pressure for such aid was in large measure transferred to the county, town and city governments. The Legislature readily granted the necessary statutory authority, which many localities proceeded to exercise in a reckless manner. Large sums were spent in aid of railroads that were never built, or that, when built, were in no position to pay interest on their obligations. When, therefore, constitutional conventions met in States in which local borrowing had been excessive, the checks that had earlier been applied to the Legislature were now applied to the localities. The Ohio convention of 1851 prohibited the loaning of the credit of a city, county, town or township to any private corporation. The Iowa convention of 1857 enacted the first percentage limitation of municipal indebtedness, fixing the limit at 5 per cent. of the assessed valuation. Illinois adopted the same limitation in 1870 and West Virginia in 1872. In 1873 Pennsylvania adopted a 7 per cent. limitation; in 1874, Wisconsin, 5 per cent.; in 1875, Missouri, 5 per cent.; in 1877, Georgia, 7 per cent., and in 1881, Indiana, 2 per cent. (See C. W. Tooke, "Constitutional Limitations of Municipal Indebtedness in Relation to Public Improvements," in *Public Improvements*, Oct. 1, 1899, pages 214–18.)

In New York, several propositions for the restriction of municipal debt were presented to the Constitutional Convention of 1846 (see Convention Documents Nos. 66, 67, 93). But the convention apparently gave little attention to the subject and contented itself with a general injunction to the Legislature to restrain municipalities in the exercise of their borrowing power. The Legislature proceeded quite promptly to comply with the injunction but the law had no sooner been passed than it was forgotten or evaded.

The Constitutional Commission of 1872 gave serious consideration to the entire subject of municipal debt. A special committee compiled detailed statistics of city, county, town and village indebtedness. The Committee in its report says "The facts and data presented show, in many instances, a great abuse in the exercise of the power of creating municipal indebtedness, and a recklessness in the creation of obligations for future generations to pay." The Committee states that "in nine-tenths of the towns, the property, real and personal, will be compelled to pay not only the interest but also the full amount of the bonds issued. Some of the towns have been bonded in this manner for twenty, thirty or even fifty per cent. of their assessed valuation." The Committee concludes, in view of the above facts, that "the time has arrived when it is absolutely necessary to impose some restraint upon the power of municipalities to incur debt, for if that process is continued in the future as it has been in the past, as shown by the statistics herewith submitted, the result will be in the highest degree disastrous."

The Committee presented in connection with its report a section prohibiting cities, towns and villages from incurring debt beyond ten per cent. of the assessed valuation. The attempt, however, to include such a restriction in the Constitution as proposed by the Commission, failed. While refusing to include a ten per cent. limitation, the Commission decided to put a stop to local aid to railroads by the adoption of the following section:

> "No county, city, town, or village, shall, hereafter, give any money or property, or loan its money or credit, to or in aid of any individual, association, or corporation, or become directly or indirectly the owner of stock in or bonds of any association or corporation, nor shall any such county, city, town or village be allowed to incur any indebtedness except for county, city, town, or village purposes. This section shall not prevent such county, city, town or village from making such provision for the aid or support of its poor as may be authorized by law."

The above provision was added to the Constitution by vote of the people in 1874.

Development of the Present Provisions. Various propositions were made in the seventies for restricting the power of cities to incur debt, but none of them became a part of the Constitution. In 1882 an amendment limiting municipal indebtedness was introduced and passed the Legislature. This amendment was repassed in 1884, adopted by the people by an almost unanimous vote, and became effective January 1, 1885. It provided that no city of over 100,000 inhabitants and no county containing such a city may become indebted in excess of 10 per cent. of the assessed valuation of real estate. The limitation was not to be construed to prevent the issue of revenue bonds, nor to prevent the issue of bonds to provide for the supply of water, but the term of such water bonds should not exceed twenty years.

The Constitution of 1894 continued the above amendment with certain modifications. The amendment of 1884 applied only to cities of 100,000 inhabitants and to counties containing such cities. The limitation in the present Constitution applies to all counties and cities in the State. A provision was inserted in the Constitution of 1894, providing that revenue bonds which are not retired within five years from their date of issue and bonds issued to provide for the supply of water and any debt incurred by any portion or part of a city shall be included in ascertaining the power of the city to become otherwise indebted. A provision was also inserted providing that whenever the boundaries of any city are the same as those of a county, the power of the county to become indebted shall cease. Owing to the creation of Greater New York this provision was altered in 1899 to apply to counties included within the boundaries of a city. As amended the clause reads as follows:

> "Whenever the boundaries of any city are the same as those of a county, or when any city shall include within its boundaries more than one county, the power of any county wholly included within such city to become indebted shall cease, but the debt of the county, heretofore existing, shall not, for the purpose of this section, be reckoned as a part of the city debt."

The Charter Revision Commission of 1900 recommended that the debt limit be so amended as to provide that after January 1, 1904, bonds issued for water supply by New York city should not be included in ascertaining the power of the city to become otherwise indebted. Large expenditures for water supply were planned (now estimated at $161,000,000). While according to the existing constitutional provision bonds could be issued for this purpose regardless of the debt limit, yet they were counted in ascertaining the power of the city to become otherwise indebted. The expenditure of this large amount would therefore greatly restrict the city's capacity to borrow money for other needed improvements. For financial and sanitary reasons, it was felt that water bonds should be exempted. An amendment in accordance with this recommendation was adopted in November, 1905. A similar need having been felt by some of the cities of the second class, the above exemption was extended to such cities by an amendment adopted in November, 1907.

The Constitutional regulation of municipal debt as amended to date is as follows:

> Art. 8, Sec. 10. "No county, city, town or village shall hereafter give any money or property, or loan its money or credit to or in aid of any individual, association or corporation, or become directly or indirectly the owner of stock in, or bonds of, any association or corporation; nor shall any such county, city, town or village be allowed to incur any indebtedness except for county, city, town or village purposes. This section shall not prevent such county, city, town or village from making such provision for the aid or support of its poor as may be authorized by law. No county or city shall be allowed to become indebted for any purpose or in any manner to an amount which, including existing indebtedness, shall exceed ten per centum of the assessed valuation of the real estate of such county or city subject to taxation, as it appeared by the assessment rolls of said county or city on the last assessment

for state or county taxes prior to the incurring of such indebtedness; and all indebtedness in excess of such limitation, except such as now may exist, shall be absolutely void, except as herein otherwise provided. No county or city whose present indebtedness exceeds ten per centum of the assessed valuation of its real estate subject to taxation, shall be allowed to become indebted in any further amount until such indebtedness shall be reduced within such limit. This section shall not be construed to prevent the issuing of certificates of indebtedness or revenue bonds issued in anticipation of the collection of taxes for amounts actually contained, or to be contained in the taxes for the year when such certificates or revenue bonds are issued and payable out of such taxes. Nor shall this section be construed to prevent the issue of bonds to provide for the supply of water; but the term of the bonds issued to provide the supply of water shall not exceed twenty years, and a sinking fund shall be created on the issuing of the said bonds for their redemption by raising annually a sum which will produce an amount equal to the sum of the principal and interest of said bonds at their maturity. All certificates of indebtedness or revenue bonds issued in anticipation of the collection of taxes, which are not retired within five years after their date of issue, and bonds issued to provide for the supply of water, and any debt hereafter incurred by any portion or part of a city, if there shall be any such debt, shall be included in ascertaining the power of the city to become otherwise indebted; except that debts incurred by the city of New York after the first day of January, nineteen hundred and four, and debts incurred by any city of the second class after the first day of January, nineteen hundred and eight, to provide for the supply of water shall not be so included. Whenever the boundaries of any city are the same as those of a county, or when any city shall include within its boundaries more than one county, the power of any county wholly included within such city to become indebted shall cease, but the debt of the county, heretofore existing, shall not for the purpose of this section, be reckoned as a part of the city debt. The amount hereafter to be raised by tax for county or city purposes, in any county containing a city of over one hundred thousand inhabitants, or any such city of this state, in addition to providing for the principal and interest of existing debt, shall not in the aggregate exceed in any one year two per centum of the assessed valuation of the real and personal estate of such county or city, to be ascertained as prescribed in this section in respect to county or city debt."

Purpose of Constitutional Provision. The effect of this provision upon the construction of subways has already been stated. Not only was the building of the present Manhattan-Bronx subway delayed several years, but the chief financial officer of the city says there is not sufficient money, owing to the constitutional debt limit, to build the routes which are imperatively needed to relieve the present congestion and to provide for future growth.

Before proceeding to state the amendments which have been proposed to remedy this situation, the purpose of the constitutional provision should be more clearly stated. When the provision was originally adopted municipal indebtedness was almost wholly devoted to works which produced no revenue.

The annual interest charge was climbing at a rapid rate, and every one foresaw that unless some restrictions were adopted, the taxpayers of the future would be called upon to meet enormous interest and sinking fund payments. Hence the constitutional amendment was adopted for the purpose of limiting this burden.

Since that time the situation has changed considerably. Millions of dollars have been invested in improvements which not only are of great advantage to the city but which produce sufficient revenue to pay not only the ordinary expenses of maintenance and operation but also the interest and sinking fund charges, and perhaps an additional profit besides. Such indebtedness is not, therefore, a burden upon the taxpayer or any part of the community, for a debt without an annual interest charge to be paid is not a burden. If, therefore, the purpose of the constitutional provision was to be carried out, the indebtedness incurred for undertakings that are self-supporting should be differentiated from indebtedness incurred for public improvements which are of public benefit but which, nevertheless, are a burden upon the taxpayer because he is obliged to pay the interest and sinking fund charges through taxation.

The amendments so far made point in this direction, for water bonds are exempt from the 10 per cent. limit, the water works being self-sustaining.

For illustration, take the $50,000,000 in bonds issued by New York city for the construction of the present subway. The operating company has agreed to pay the city the interest and sinking fund charges upon the entire amount issued. As long as it does so, this debt is not a burden upon the taxpayer. Indeed the expenditure of this amount of money has greatly benefited a portion of the taxpayers, all of those who have owned property along the greater portion of the subway. Thus the existence of this debt of $50,000,000 constitutes a valuable asset; but if a future subway should be built which should not be self-sustaining and if taxpayers should be called upon to pay part of the interest upon the bonds in whole or in part, this debt would be a burden upon the taxpayer just to the extent to which it would prove to be not self-supporting.

Furthermore, every addition to the property owned by the city, even though it be earning a profit to the city, reduces the amount of debt that may be incurred not only for revenue producing undertakings but for other purposes, such as schools, libraries, baths, parks, play-grounds, etc., a condition of affairs which ought not to continue, for the development of no city ought to be retarded by the fact that it has acquired a piece of property which is making a profit for the benefit of citizens or taxpayers.

Certain Debts Exempted. These facts have been recognized already by the Constitutions of several States in one way or another. In some cases *ad hoc* bodies have been created and given the power to incur debt separately from the cities. In some cities special assessment bonds are exempt from the debt limit, either by provision of law or by making them a lien only on the property for which the assessment is levied. In many cities, particularly in the west, practically the entire cost of street openings and street improvements, including both the original pavement and all repavements, are assessed on the abutting property or that specially benefited by the improvement. This system has been developed particularly in cities like Chicago, where the debt limit is so extremely low that every expedient must

be used to gain the necessary debt margin for the most necessary expenditures. If the special assessment system should be extended as suggested, and all future assessment bonds be made by their terms a lien solely on the property assessed, the borrowing capacity of the city might thus be materially enlarged, for such bonds impose no liability against the city, and therefore are not to be counted in determining its borrowing capacity.

In a number of States a device has been used to avoid the constitutional limitation in the case of debts for revenue-producing industries. The plan has been to secure the debt solely by a mortgage upon the plant or property for which the debt is incurred. As such a debt can never become a burden upon the taxpayers of the city, it is not considered in estimating the amount of indebtedness for purposes of the debt limit. A Missouri act (Laws of 1905, page 55) permits cities of 3,000 to 30,000 to acquire water works and issue bonds therefor secured simply by a mortgage on the plant and involving no general liability to the city. In case of default of payment, the works are to be conveyed to the bondholders, with a franchise for thirty years. A similar act was passed by Iowa in 1906.

The most important resort to this method was in the case of the attempted municipalization of the street railways of Chicago. The constitutional debt limit of Chicago is 5 per cent., and this, taken in connection with the very low percentage of the true value at which property is assessed, made it absolutely impossible for the city to consider the purchase of the railways, if the debt incurred was to count against the constitutional debt allowance. To obviate this difficulty the act of 1903, known as the Mueller Law, was passed to permit the issue of "street railway certificates" in place of bonds. These certificates are not a general liability against the city, but are payable solely out of the income from the street railways. The certificates constitute a mortgage on the street railway property, and in default of payment include the right to a twenty-year franchise. An ordinance providing for the issue of certificates under the above law has recently been declared to be unconstitutional. (227 Ill. 218.) The court held that the issue of certificates secured solely by the property acquired from their proceeds did not constitute the creation of debt within the meaning of the constitutional limitation. In the case at issue, however, the certificates were secured by a twenty-year franchise to operate in addition to the railway property acquired. This franchise was city property not acquired through the issue of the certificates. The mortgaging of the franchise must, therefore, be deemed a debt within the meaning of the constitutional limitation.

The new Virginia Constitution provides that, if the principal and interest of a debt are made payable exclusively from the receipts of the undertaking, such debt shall not be considered in determining the power of a city to become otherwise indebted. A Wisconsin act of 1907 permits municipalities to issue certificates for municipal plants secured by a mortgage on the plant acquired and involving no general municipal liability.

The Constitutions of many States contain more or less distinct recognition of the need for some different treatment of debt limitation in the case of revenue-producing industries. Often the Constitution does not establish a single limit, but fixes a certain percentage limit for general purposes and another percentage for specified purposes. Thus, the Constitution of Missouri fixes the general limit at 5 per cent., but permits certain cities to incur a

debt for water and light up to an additional 5 per cent. In a few States a certain limit is fixed which may be exceeded if the bond issue is approved by vote of the people. Thus in North Dakota the limit is fixed at 5 per cent., but by a two-thirds vote of the electors a city's debt may be increased. Debt incurred for specific purposes is often exempted. This is most frequently true of water debt, and in recent years there has been a marked trend toward the similar exemption of debt for gas and electric plants and other revenue-producing industries. Special exceptions in the case of one or more of these industries are found in the Constitutions of Alabama, Colorado, Missouri, Montana, North Dakota, South Carolina, South Dakota, Utah, Virginia and Washington.

The Virginia Constitution revised in 1902 is the most recent of the State Constitutions. Section 127 limits municipal indebtedness to 18 per cent. of the assessed valuation of real estate, but excepts from this limitation bonds approved by popular vote and issued for a supply of water or other specific undertaking from which the city or town may derive a revenue. It is, of course, evident that certain municipal undertakings, which one may think will be self-supporting, may prove to be otherwise. It is also possible that the policy of a city, as regards rates charged for a particular service, may change so that an industry at one time self-sustaining may become a burden on the taxpayers. As a safeguard against such a contingency, the Virginia Constitution provides that, whenever a municipal undertaking fails to produce sufficient revenue to pay cost of operation, insurance, interest on bonds and sinking fund charges, the exemption of such bonds from consideration in determining the limitation of the city's power to incur further indebtedness shall cease, unless the principal and interest of such debt be made payable exclusively from the receipts of the undertaking.

The advisory commission on taxation and finance appointed by Mayor McClellan made a special report in April, 1907, on "the city debt in its relation to the constitutional limit of indebtedness." This commission recommends that provision be made for an amendment to the Constitution increasing the city's power to incur debt. The commission states that the chief purpose of the constitutional debt limit is to prevent the city from imposing too great a burden of debt upon the taxpayers. If, however, a public industry proves self-supporting or profitable, there is no burden on the taxpayers, and the necessity for the constitutional restriction fails. The commission recommends that bonds issued for self-supporting enterprises be exempted from the terms of the constitutional limitation so long as they shall continue to be self-supporting. The commission proposes a scheme by which, should an enterprise ever become nonsupporting, the bonds issued to defray its cost would immediately be counted in estimating the city's indebtedness.

APPENDIX J.

THE HISTORY OF STATE REGULATION IN NEW YORK.

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I. GAS AND ELECTRICITY.

State Inspector of Gas Meters. Chapter 311 of the Laws of 1859 is entitled "An act to provide for the inspection and sealing of gas meters, and for the protection of consumers of illuminating gas." The act provides for an inspector of gas meters appointed by the Governor and Senate for five years. It is provided that the inspector must reside in New York city, and that his salary of $1,500 shall be assessed on the companies. In 1890 his salary was fixed at $2,500, and in 1893 at $5,000. By the Act of 1905 (chap. 737), establishing the State Commission of Gas and Electricity, the State Inspector was subjected to the supervision of the State Commission. The office was abolished by the Public Service Commissions Act of 1907, its duties being devolved upon the new commissions.

State Commission of Gas and Electricity. During the years 1885 and 1886 the investigation of the gas companies of New York city was undertaken by committees of the Legislature. As a result an act was passed limiting the price of gas to $1.25 and giving greater freedom for the incorporation of gas companies, with a view to securing competition. A bill was also passed creating a commission of three members to control the gas companies of New York city. This bill was vetoed by Governor Hill, on the ground both that the powers conferred on the commission were too drastic and that if such a commission were created its jurisdiction should cover the entire State. In his messages to the Legislature of the two succeeding years he recommended the creation of a State Gas Commission. In his message of 1887 he says: "I recommend the appointment of a state commission with power under reasonable restrictions to regulate and control the management of all gas companies, throughout the State, such commission to be maintained at the expense of the gas companies." In 1889, and again in 1891, Governor Hill recommended the creation of a State Commission with supervisory powers over gas, electric light, telephone and telegraph companies. In 1901 Governor Odell recommended "that gas and electric lighting companies, and questions relating to their organization, administration and control shall be placed in the hands of the Railroad Commission."

During the years 1902 to 1905 there was persistent complaint in regard to the gas and electric rates and service in New York city. The charges for public lighting were held by the city authorities to be exorbitant, and the bids submitted by the companies were rejected in 1902, but accepted under a changed city administration in 1904. Application for relief was made to the Legislature, and that body in 1905 appointed a joint committee

to investigate the entire subject. Frederick C. Stevens was chairman of this committee and Charles E. Hughes counsel. The committee took four volumes of testimony and, in its report to the Legislature of 1905, recommended a reduction in the price of gas and electricity in New York city, and the creation of a permanent State Gas and Electricity Commission, with power to regulate and control gas and electric companies throughout the State. The Act of 1905 (chap. 737), passed in accordance with this suggestion, is entitled "An act to establish a commission of gas and electricity with power to regulate the price of gas and electric light and certain other electric services, and to provide for the control and supervision of gas, electric light and other electric corporations." The act provides for three commissioners to be appointed by the Governor at a salary of $8,000. The Governor appointed Frederick E. Gunnison, John C. Davies, and Lucian L. Sheddon Commissioners. Their appointment was confirmed by the Senate July 20, 1905. This commission was succeeded July 1, 1907, by the present Public Service Commissions.

II. RAILROADS.

The Mohawk and Hudson, the first steam railroad built in the State, opened its line between Albany and Schenectady in 1831. Prior to 1848 all railroad corporations were incorporated by special act of the Legislature, and were required by these special charters to file annual reports with the Secretary of State. No provision was made for printing the reports until 1843 (Assembly resolution of February 2, 1843). The first printed report of this nature was in 1844 (Assembly document No. 123). Similar reports were made up to and including the year 1848 (Annual report of the Secretary of State relating to railroad statistics). In 1842 the Assembly adopted a resolution requiring each railroad company to make a report in tabular form, showing receipts and expenses for each year since organization. Thirteen companies submitted reports in compliance with this resolution. The first general law for the organization of railroad companies was passed in 1848 (chap. 140). This act provides that maps and profiles of the roadway shall be filed with the State Engineer and Surveyor (§ 43), and that an annual report shall be made to the same official (§ 28). The provision as to annual reports was amended in 1849 (chap. 434), and it was made the duty of the State Engineer to publish these reports in tabular form. The general revision of the Railroad Law in 1850 (chap. 140) again revised the provision as to reports, requiring information as to finances, equipment, and service arranged under 102 headings.

Railroad Commission, 1855–57. In 1855, John T. Clark, State Engineer and Surveyor, in transmitting to the Legislature his annual report on railroad statistics, called attention to the need of increased supervision, especially with a view to securing greater publicity of conditions, and recommended the creation of a State Board of Railroad Commissioners. The creation of such a Board was authorized by chapter 526 of the Laws of 1855. The Board consisted of the State Engineer and Surveyor, one person appointed by the Governor and Senate, and one person elected by the boards of directors of the various railroads. The State Engineer was president, and the member appointed by the Governor, secretary of the board. The members, except the State Engineer, received a salary of $2,500. The annual reports formerly made to the State Engineer were transferred to the new Board, and it was

granted many additional duties and powers. New roads could not open for business without the certificate of the Board, after inspection, that they were in proper physical condition. Reports of accidents were required, and the board was authorized to investigate and report on the cause of any accident. Railroad by-laws, rules and regulations, in order to have legal force, were required to have the approval of the Board. In addition to the annual reports, the Board was authorized to require special reports at any time on any subject. The Board could also at any time make a general examination of the affairs of a company and inspect all books and papers. It was the duty of the Board to report to the Attorney-General any infraction of law on the part of a company. The two annual reports made by this Board, covering the years 1855 and 1856, contain detailed statistics of railroad accounts and operations and a careful analysis of the same. In 1856 the State Engineer, Silas Seymour, himself a member of the Board, sent a communication to the Legislature asking that the Board be abolished. The Assembly committee to whom his communication was referred concurred in his view of the matter. The committee reported (Assembly Doc. 123, 1856) that the Act of 1855 placed arbitrary and drastic powers in the Board, that it served no useful purpose, and should be repealed. A bill to abolish the Board passed the Assembly. In the Senate it was referred to a committee that reported it adversely, on the ground that the Board was needed to secure publicity of railroad finance and a due measure of safety in operation. In 1857 two of the three members of the Board, Silas Seymour, State Engineer, and William J. McAlpine, the member representing the railroads, again recommended the repeal of the law, and the Legislature complied with their request. (Laws of 1857, chap. 633.)

State Engineer and Surveyor. With the repeal of the Commission Law of 1857, the duty of receiving, tabulating, and publishing the annual reports of the companies again devolved on the State Engineer, who continued to perform this function until the establishment of the State Board of Railroad Commissioners in 1882.

State Board of Railroad Commissioners. In 1876 and 1878 bills for the the creation of a State Board of Railroad Commissioners were introduced. In both of these years Simon Sterne presented arguments in favor of the bills to the committees of the Legislature. In order to better educate the public as to the need of railroad regulation through a permanent State Board, a resolution was passed by the Assembly in 1879 for an investigation of railroad management and finance. The committee, of which A. B. Hepburn was chairman, made an extensive investigation. Five volumes of testimony were taken. The report signed by six of the nine members of the committee, made to the Legislature of 1880, states that effective regulation can only be secured by the creation of a permanent State Board. A bill to carry out this recommendation was introduced in 1880 and again in 1881. In both years it passed the Assembly, but was defeated in the Senate. In 1881 the railroad committee of the Senate, in an adverse report on the bill, said: "While some citizens representing a few localities favored its passage, the manufacturing and business interests of the State were overwhelmingly against." Finally in 1882, after a bitter contest, the bill passed both houses and was signed by the Governor. The act, however, did not take effect until January 1, 1883. The act provides for a Board of three commissioners to be appointed by the Gov-

ernor, with the consent of the Senate. One of the commissioners was to be selected on the recommendation of the Chamber of Commerce of the State of New York, the New York Board of Trade and Transportation, and the National Anti-Monopoly League of New York. The remaining two members were to represent the two largest political parties, and one of them was to have had experience in railroad business. The salary of Commissioners was fixed at $8,000. In the General Railroad Law of 1890 (chap. 565) the provisions for bipartisan representation and for the appointment of one member on the recommendation of certain commercial organizations were omitted. In 1905 (chap. 728) the membership of the Board was increased from three to five. The powers of the Commission were quite limited. No effective method was provided for the enforcement of its orders and recommendations. At the time of the creation of the New York Commission in 1882 there were in the various States numerous railroad commissions, and these have been classified as "strong" or "weak" commissions, according as their function was that of control, extending to the making of rates, or merely that of supervision and recommendation. The New York Commission was in this sense distinctly a "weak" commission. Its reports to the Legislature contain frequent reference to the disregard on the part of the companies of its orders and recommendations and to its inability to enforce the same.

January 1, 1907, the State Board of Railroad Commissioners consisted of the following persons: George W. Dunn, Joseph M. Dickey, Frank M. Baker, George W. Aldridge, and Henry N. Rockwell. In accordance with the provisions of chapter 429 of the Laws of 1907, this Board ceased to exist, and its duties devolved upon the Public Service Commissions, July 1, 1907. These Commissions, in contrast with the Board they superseded, were clothed with strong and far-reaching powers for the regulation of railroads and street railways.

III. RAPID TRANSIT COMMISSIONS.

Investigation of 1866. In 1866 the following resolution was adopted by the State Senate:

> "*Resolved*, That a select committee of three be appointed to sit during the recess with the mayor of the city of New York, the State Engineer and the Engineer of the Croton Board, to ascertain and report to the Senate the most advantageous and proper route or routes for a railway or railways, suited to the rapid transportation of passengers from the upper to the lower portion of the city of New York, having in view the greatest practical benfit and safety to the public, and the least loss and injury to property on or adjacent to said route or routes."

George H. Andrews, H. R. Low and Charles G. Cornell were appointed from the Senate to serve on this commission. John T. Hoffman, mayor of New York and Alfred W. Craven, engineer of the Croton Board were the *ex officio* members. Many plans for the construction of underground and elevated roads were submitted to the Commission. After consideration of these plans the commission decided upon the construction of underground

railways. The conclusions of the commission are summarized as follows: (N. Y. Senate Documents 1867, No. 28.)

"1. That commercial, moral and hygienic considerations all demand an immediate and large addition to the means of travel in the city of New York.

"2. That if every avenue lengthwise of the island were to be occupied at once by surface rails, the relief afforded thereby would not be adequate to present requirements, and in three years' time the pressure with all its accompanying annoyances, inconveniences and dangers, would be as great as it is to-day.

"3. That the steam roads upon the surface, now in use, should be removed from the island of New York as soon as other sufficient and rapid means of transportation can be substituted.

"4. That a central line alone would not suffice to meet the present requirements for increased facilities.

"5. That elevated railways erected on supports in the middle or on the sides of the *present* streets of the city cannot be *fully* adapted to the transportation of freight, and have never been tested in any practical way so as to warrant an unconditional recommendation of them for transportation of passengers.

"6. That a system of railways running wholly through blocks would involve an expense for right of way, and resulting damages which would render it impracticable to convey passengers for long distance at rates of fare as low as the necessities of the case require, and would, moreover, involve too great delay in the acquisition of the right of way required.

"7. That the continual increase of population, and the consequently growing necessity for transportation throughout the city will very soon demand the construction of several lines of railways other than surface roads. That more than the two roads herein recommended may be eventually required and successfully operated, and the opening of new avenues and the erection therein of viaducts upon the scale hereinabove mentioned may be found to be of the greatest advantage and improvement to the city, and while gratifying the public taste will effect the desired object.

"8. That underground railways passing under streets present the only speedy remedy for the present and prospective wants of the city of New York, in the matter of the safe, rapid and cheap transportation of persons and property."

The above report was without practical result.

Westside and Yonkers Patent Railway Company. The Westside and Yonkers Patent Railway Company was organized in 1866. Charles T. Harvey presented to the special Senate Commission of 1866 the plan of this company for an elevated cable railway. The Commission recommended that the company be authorized to construct an experimental section one-half mile in length. Statutory authority for this was granted by the Legislature in 1867. An act of 1867 (chapter 489) as amended in 1868 (chapter 855) provides for the construction by the Westside and Yonkers Patent Railway Company of an elevated railway from the Battery to the Harlem river. An experimental section one-half mile in length was first to be constructed and when this section had been inspected and approved by a special commission of three

members, two appointed by the Governor and one by the Croton Aqueduct Board, the road could be extended to the Harlem. The commission was empowered to pass on plans of construction, limit the maximum speed and perform other specified duties of supervision. The company was required to pay 5 per cent. of its net income to the city. This revenue was to be kept as a special fund to be expended by the commissioners in the improvement of the condition and appearance of the streets along which the railway was to be constructed. The Governor appointed as Commissioners, Freeman J. Fithian and John H. Morris, and the Croton Board appointed Jacob S. Freer. The experimental line was built and was approved by the Commissioners July 1, 1868. The company experimented with the propelling cable until 1871, when it was abandoned. At that time the road had been extended to Thirtieth street, a distance of about 3½ miles. In 1871 the use of the dummy engines was substituted for the cable system. The use of steam was at once demonstrated to be a success. The company commenced transporting passengers about the month of April, 1871, by running a train of two passenger cars. The company became involved in financial difficulties and in 1871 its property and franchises were sold under foreclosure, and shortly afterward taken over by a new corporation organized under the name of The New York Elevated Railroad Company. (See report of Commissioners of the Westside and Yonkers Railway Company, New York Assembly Documents, 1872, No. 78).

Gilbert Elevated Railway Company. An Act of 1872 (chap. 885) is entitled "An Act to incorporate the Gilbert Elevated Railway Company and to provide a feasible, safe and speedy system of rapid transit through the city of New York." It provides for the construction of elevated, inclosed, tubular railways along routes to be determined by a Board of five Commissioners named in the Act. The Commissioners named were Henry G. Stebbins, Quincy A. Gilmore, Shepherd Knapp, Chester A. Arthur and John A. Dix. The Commission determined on routes (Senate Documents, 1873, No. 84) but the Legislature by special act in 1873 (chap. 837) gave the company permission to change the routes prescribed in certain respects, and also prohibited the company from constructing its road along Broadway below Thirty-fourth street. In lieu of this route the act provides that a Commission of five members shall be appointed by the Governor to fix a route for the company from the southerly end of West Broadway to Bowling Green. The elevated tubular system was found to be too expensive, however, and it was not until the company had been empowered by the Rapid Transit Commission of 1875 to adopt more economical plans that the company was enabled to finance the undertaking.

Rapid Transit Act of 1875. In 1875, Mayor William H. Wickham actively took up the problem of rapid transit. He considered the subject at length in his regular message to the Board of Aldermen, January 4th; again in a special message of January 28th; and again in a communication to the State Assembly on May 11th. In his message of January 4th he notes that some measure of relief is being provided by the tunneling of Fourth avenue above Forty-second street for the tracks of the Hudson River railroad. He states that the city's proportion of the expense is $3,200,000, and that by the law authorizing the improvement, two of the four tracks are to be devoted exclusively to rapid transit within the city.

In his special message of January 28th, he recommends the appointment of a committee to investigate the subject of rapid transit. He says:

> "It may, I think, be now safely assumed that the discussions of the subject have produced a concurrence of opinions on these cardinal points; that any substantial improvement upon the present inadequate means of transportation and travel within the city will be effective in developing the growth and general prosperity of the city, and enabling us the more easily to bear our present heavy burden of debt and taxation; that the work should be constructed, if practicable, by private capital, and not by the city; that capitalists should be encouraged to undertake the enterprise by permission to select routes along which business is likely to be profitable; that the roads should be built upon a system which will not only connect the localities in which are residences with the business quarters, but reach the points at which travelers arrive in or depart from the city; that the construction of a road along an avenue or street will not necessarily, even temporarily, depreciate, but, in the end, will enhance the value of neighboring property; and that the owners of premises situated on the route should regard that result, and their share of the great benefit to our community at large, as compensation for what they may have expected to be for a time a local disadvantage."

The special committee of the board of aldermen made a report March 4th and a supplemental report March 18th. Majority and minority reports were submitted, the majority report being signed by three members and the minority report by two members. The Committee divided on the question of private versus public construction and operation. The majority report as first submitted favored private construction and operation but with alternative public ownership in case no private corporation could be induced to undertake the work within six months from the time of the appointment of the Commission. In their supplemental report of March 18th, however, they state that after more maturely considering the subject they have become convinced that private enterprise should be granted a longer time in which to decide whether to undertake the enterprise, and that the proposed bill be so amended as to omit all provisions providing for an alternative public construction and operation. The minority in its report both of March 4th and March 18th argues strongly in favor of municipal construction and operation. Their report states that "from the weight of argument produced before us, and from our individual judgments, based upon arguments, as well as from what we believe to be the conviction of a majority of the people of this city, the undersigned have come to the conclusion that the best and only plan to secure the speedy attainment of rapid transit in this city is the construction of an east and west side double track road with intersecting lines of communication, to be built, owned and operated as a public work." When the question came up in the board of aldermen as to the adoption of the majority report recommending private ownership or of the minority report recommending public ownership, the proposition for public ownership was defeated by a vote of nine to twelve; after which the majority report was unanimously adopted.

Chapter 606 of the Laws of 1875 is entitled "An Act further to provide for the construction and operation of a steam railway or railways in the

counties of the state." It provides that on petition of fifty taxpayers that there is need for a steam railway or railways the board of supervisors of a county or the mayor of a city may appoint five commissioners to determine on the necessity of such railway and adopt routes and plans. Commissioners could be removed for cause by the appointing power. They were to receive $10 a day for actual service, provided sufficient stock subscriptions were received within a year to warrant the formation of a constructing and operating company. The route must receive the approval of the local authorities and the consent of the owners of one-half in value of the abutting property, or the substituted consent of three commissioners appointed by the General Term of the Supreme Court. The commissioners were authorized to fix the maximum rates to be charged and to supervise the organization of a company to construct and operate the route. They were to fix the capital stock, prepare articles of association, fix the number of directors, open subscription books, and call a meeting for organization. If, however, the routes determined on coincided with the routes covered by the charter of an existing corporation, such corporation could be authorized to construct and operate the road. The commissioners were also empowered to grant certain additional franchises to existing elevated roads. They could "Fix and determine the route or routes by which any elevated steam railway or railways now in actual operation may connect with other steam railways or the depots thereof, or with steam ferries."

Rapid Transit Commission of 1875. Application having been made in accordance with the provisions of the above act, July 1, 1875, Mayor Wickham appointed the following commissioners to pass upon routes and plans: Joseph Seligman, Lewis B. Brown, Cornelius H. Delamater, Jordan L. Mott, Charles J. Canda. The Commission reported to the mayor on September 6 and October 6, 1875; in its report of September 6 the Commission says:

> "During the past fifteen years, no subject has occupied the public attention to a greater degree than that of providing means of rapid transit in this city; and yet, at the passage of the Rapid Transit Act, although numerous charters had been granted by the Legislature, it did not appear that, excepting the road of the New York Elevated Railroad Company, any progress whatever had been made toward the desired result. The difficulty seems to have been either that the plans proposed were too expensive or that the routes selected were not such as to induce capitalists to venture the investment."

Many plans were presented to the Commission but it quickly decided on the elevated steam road as the most practicable. The commissioners say:

> "Remembering the discussion had during the last fifteen years and the history of the several attempts in that time made, to reach the results desired; considering the circumstances of the present situation; and advised by engineers, and by capitalists as well — we had, before the date of our previous report, reached the conclusion that elevated steam railways are not only more likely than any other steam railway to be actually constructed in this city, but are the best for the purpose in view."

The New York Elevated Railroad Company and the Gilbert Elevated Railway Company already possessed franchises along routes that seemed

to the Commission most available. The routes adopted were the present Second avenue, Third avenue, Sixth avenue, and Ninth avenue elevated routes from the Battery to the Harlem. The commissioners state that although they have received reasonable assurances from the New York Elevated Railroad Company and the Gilbert Elevated Railway Company that they will construct and operate railways upon the routes provided by the Commission, yet in order to make assurances doubly sure, they consider it wise to incorporate a new company. Accordingly the Commission, under the authority granted it by the Act, organized the Manhattan Railway Company, to undertake construction in case of the failure of the above-named companies to construct within the prescribed time.

The Commission fixed the rate of fare for any distance between the Battery and Fifty-ninth street at not to exceed ten cents. Additional charges, at prescribed rates, were allowed for greater distances. The fare from the Battery to the Harlem river on the east side was fixed at not exceeding fifteen cents. Following the plan in England, of running special "Parliamentary Trains" during certain hours for the accommodation of the laboring people, the Commission prescribed a system of special trains to be known as "Commission Trains" to run between 5:30 and 7:30 a. m. and between 5 and 7 p. m., at one-half the above named rates.

Rapid Transit Commission of April 2, 1879. April 2, 1879, Mayor Edward Cooper appointed a Board of Commissioners of Rapid Transit, under the provisions of the Act of 1875. The following commissioners were appointed: Henry F. Spaulding, Henry G. Stebbins, Benjamin G. Arnold, Lewis G. Morris, Samuel R. Filley. The application for the appointment of the Commission alleges that there is need in the twenty-third and twenty-fourth wards of the city for a steam railway or railways, and that there is special need of a steam railway or railways to connect the New York Elevated Railroad from different points on the south side of the Harlem and the Spuyten Duyvil Creek with points on the north side of these streams, and with points in the twenty-third and twenty-fourth wards. In its report to the mayor and board of aldermen July 18, 1879, the Commission summarizes its action as follows:

> "1st. The formation of 'The Suburban Rapid Transit Company' for the construction and operation of routes designated in our communication to the Mayor, of June 14th, as the Central route, the East side route, the Jerome Avenue branch, the Fordham Avenue branch, the Westchester branch, and the route for the crossing of the Harlem River.
>
> 2nd. The formation of 'The West Side and Yonkers Railway Company,' for the construction and operation of the routes designated as the Harlem River, Kingsbridge and Riverdale Route.
>
> 3rd. The formation of 'The Hunt's Point Branch Railway Company,' for the construction and operation of the route designated as the Hunt's Point Route.
>
> 4th. The formation of 'The Park Avenue and City Hall Railway Company,' for the construction and operation of the routes designated by our resolution of June 11th.
>
> 5th. The connection of the New York Elevated Railroad with the Metropolitan Elevated Railway through Fifty-ninth Street.

6th. The connection of the New York Elevated Railroad with the Spuyten Duyvil and Port Morris Railroad, the New York City and Northern Railroad, and the Harlem River and Portchester Railroad."

Forty-eight days after the appointment of the above Commission a merger of the two existing elevated roads was effected, through the leasing of the New York Elevated Railroad and the Metropolitan Elevated Railway to the Manhattan Railway Company. It was thought that had it not been for this consolidation, the existing companies would have been interested in extending their lines beyond the Harlem. As it was, they evinced no desire to do this, and the Commission decided on the formation of new companies to construct thirty and one-half miles of elevated road beyond the Harlem. The Commission also made provision for the construction of a road from Forty-second street to the city hall, partly underground and partly elevated, in order to connect with the New York Central and Hudson River railroad, and thus form a continuous rapid transit route from the city hall to the northern extremity of the city. In connection with the above route, the Commission, in its report to the mayor, says:

"The public interest demands a healthy competition as an essential part of the rapid transit system; and when we found that during our term of service a consolidation of the existing lines had been effected, which was quite possibly the cause of the indifference of the existing companies to the construction of the routes north of the Harlem River located by us, such consolidation seemed to us an additional reason why the public would be benefited by the construction of the new rapid transit line, from the City Hall to the north line of the City, for which we have sought to provide."

However, as this route could not be profitably operated by any other company than the New York Central and Hudson River Railroad Company, and as this company did not care to undertake construction in accordance with the plans adopted by the Commission, the Commission took no further action in regard to it.

The legality of the Commission's action in determining on the formation of various companies for the construction of roads along the routes above described was seriously questioned. It was contended that when the Commission had organized the West Side and Yonkers Railroad Company its power was exhausted, and that it had no authority to organize other companies as contemplated by it. Taking this view of the matter, the mayor appointed a new Board of Rapid Transit Commissioners August 30, 1879. The question of conflicting jurisdiction, as between the two commissions, was settled by the Supreme Court in the spring of 1880. This decision was to the effect that the old commission appointed April 2, 1879, could organize but one company, and that when it had organized the West Side and Yonkers Railroad Company its powers were exhausted. The West Side and Yonkers Railroad Company was organized July 21, 1879. It was constructed as a steam surface road. May 1, 1880, it was leased to the New York City and Northern Railroad Company.

Rapid Transit Commissions 1879–1880. August 30, 1879, Mayor Edward Cooper appointed a rapid transit commission, consisting of the following members: Richard M. Hoe, John J. Crane, Gustave Schwab, Charles L. Perkins

and William M. Olliffe. Action by this Commission was held up, pending the determination of the question of jurisdiction as between it and the Commission appointed April 2, 1879. A commission consisting of the same members was appointed on a new application, January 15, 1880. They laid out two routes and, April 26, 1880, organized the Jerome Park railway. The route from Jerome Park station to Jerome Park was completed during the same year and operated by the New York and Harlem Railroad Company. March 6, 1880, the same commissioners were again appointed on a new application. In October, 1880, they organized the Suburban Rapid Transit Company. June 4, 1891, the lines of this company were leased to the Manhattan Railway Company.

Rapid Transit Commission of 1883. November 30, 1883, Mayor Franklin Edson appointed as commissioners of rapid transit the following persons: Daniel Drake Smith, George H. Byrd, Thomas E. Stewart, Abraham L. Earle and E. R. Livermore. In their application for the appointment of the commission the petitioners call attention to the superior advantages of the system of surface cable roads to existing horse car and steam elevated roads. They also state it as their opinion that the commission has authority under the act of 1875 to lay out cable surface routes as well as steam elevated routes. This was a doubtful point, but the Commission, after securing legal advice determined that it had such power and accordingly located twenty-nine routes, covering some seventy miles of the streets of the city. The road was to be constructed as an elevated road for only seventeen of its seventy miles. The Commission organized the New York Cable Railway Company to construct and operate the road. However, the general term of the Supreme Court refused to grant its consent on account of errors and irregularities connected with the adoption of the routes. The Legislature of 1884 definitely determined the disputed question of jurisdiction by enacting that surface roads could not be laid out under the provisions of the rapid transit act of 1875.

Mayor Hewitt's Plan in 1888. In 1888, Mayor Abram S. Hewitt, in his message to the common council took up the question of increased transit facilities and recommended the extension of the New York Central tracks from Forty-second street to the city hall. The proposed plan of construction and operation was similar in general outline to the plan under which the present subway was constructed. The proposal met with much public opposition and was not accepted by the New York Central railroad. Mayor Hewitt then favored the construction of other rapid transit routes in accordance with similar plans and caused a bill to be drafted to carry out his ideas. The bill was not favored by the common council and made no progress before the State Legislature. This bill, applying to cities of 800,000 was the model on which were based the provisions of the act of 1894 providing for municipal construction and ownership of the subway.

Rapid Transit Commission of 1889. A rapid transit bill was introduced in 1889 which passed one house of the Legislature but failed of enactment owing to a difference of view as to the method of appointment of the commission. In April, 1889, Mayor Hugh J. Grant appointed a board of Rapid Transit Commissioners consisting of August Belmont, John H. Starin, O. B. Potter, William Steinway and Woodbury Langdon. On June 20, 1890, in a communication to Mayor Grant the Commission referred to the difficulty under which it worked owing to the fact that the statutes exempted so many streets

as to make it impossible to provide for a route that would be of great benefit. The Commission, however, adopted a route from city hall to Forty-second street. The project, however, was abandoned.

Rapid Transit Act of 1891. December 23, 1890, in accordance with an application made under chapter 606 of the Laws of 1875, Mayor Hugh J. Grant appointed a rapid transit commission consisting of the following members: William Steinway, John H. Starin, Samuel Spencer, Eugene L. Bushe and Frederick P. Olcott. Frederick P. Olcott failed to qualify as commissioner and on January 5, 1891, the mayor appointed John H. Inman in his place. But the provisions of the Act of 1875 were deemed inadequate to meet the needs of the situation and the Legislature of 1891 passed an act entitled "An act to provide for rapid transit railways in cities of over 1,000,000 inhabitants." This act could, under its terms, apply only to New York city. It repeals the Act of 1875 only in so far as the latter would authorize the appointment of a commission in a city of 1,000,000 inhabitants; the Act of 1875 was, however, wholly repealed by the general Corporation Law of 1892 (chap. 687). The Act of 1891 contemplated the creation of a permanent Commission with greater powers for effectively dealing with the rapid transit problem. It provides that the commissioners appointed by the mayor December 23, 1890, shall continue to hold office and shall constitute a board of rapid transit railroad commissioners. Any vacancy occurring in the board shall be filled by the mayor by the appointment of a citizen belonging to the same political party as the commissioner succeeded. Many of the sections of the Act of 1891 are in fact a re-enactment or revision of corresponding sections in the Act of 1875.

The commission was granted very broad power to grant additional franchises to existing railroad corporations. In regard to the construction of additional rapid transit railroads, the act provides that the commission shall, *first*, adopt routes and general plan of construction; *second*, obtain the consent to the construction and operation of such railroad by the local authorities and the property holders affected, or if the consent of the property holders be withheld, then the substituted consent of the General Term of the Supreme Court; *third*, adopt detailed plans for the construction and operation of such railroad; *fourth*, sell the right to construct and operate such railroad to a corporation to be formed under the terms of the act, for such a period of time as the commission should deem advisable and upon such terms as it should be able to exact.

The board appointed William C. Worthen and William Barclay Parsons as its engineers. The board soon reached the unanimous conclusion that additional transit facilities were essential and that such facilities could be obtained in a manner adequate to the needs of the city only by the construction of underground railroads. It accordingly adopted a plan for the construction of a railroad running underground through the built-up portions of the city and upon an elevated structure in the northerly portions. The consent of the local authorities and of the General Term of the Supreme Court was readily obtained. The board offered the franchise for sale to the highest bidder on December 29, 1892, but no responsible bidder was found willing to undertake the enterprise. After the failure to sell the franchise and before the enactment of the Statute of 1894, there ensued a long negotiation between the Commission and the Manhattan Railway Company with reference to an

application which had been made somewhat earlier by that company for leave to build elevated railways upon a number of additional streets. These negotiations were dropped in August, 1893, because of the unwillingness of the company to make such compensation to the city for the desired facilities, as was deemed reasonable by the Commission.

Rapid Transit Act of 1894. Soon after the failure of the Commission of 1891 to provide for the building of a railroad, Richard T. Wilson made the proposition that he would take the franchise and build the road on the terms proposed, provided the city would advance a large percentage of the necessary funds at a moderate rate of interest. It was apparent that this suggestion could not be complied with under the terms of the State Constitution forbidding the city "to loan its money or credit to or in aid of any individual, association or corporation." This suggestion, however, led to the adoption of a plan somewhat similar in effect, which was proposed by Abram S. Hewitt and supported by the Chamber of Commerce. The essential feature of this plan, as incorporated in the Rapid Transit Act of 1894, permits the city itself to build and own a Rapid Transit Railroad, but in order to secure efficiency in construction and as a safeguard against an unprofitable undertaking, the contractor is required to agree to take a lease of the railroad and equip and operate it for a term of years. This is substantially the same plan as that proposed in a bill advocated by Mr. Hewitt in 1888.

The Act of 1894 (chap. 752) is technically a revision of the Act of 1891 (chap. 4). It provides for a new Rapid Transit Board consisting of the mayor, the comptroller, the president of the chamber of commerce and five members designated in the act. The members designated were William Steinway, Seth Low, John Claflin, Alexander E. Orr, and John H. Starin. The act provides that vacancies occurring in the offices held by other than ex-officio members shall be filled by a majority vote of the remaining members of the board. The act left unmodified the provisions of the Act of 1891, authorizing the board to grant additional franchises to existing railroads. The act provides that after adopting plans for a new railroad, the board at the next general election shall submit to the qualified electors of the city "the question whether such railway or railways shall be constructed by the city and at public expense." If such question be determined in the negative, the board shall proceed to sell the franchise to construct and operate the railroad to a private corporation in the manner prescribed in the Act of 1891. If the popular vote shall be in favor of municipal ownership, the railroad shall be constructed at public expense, and remain the absolute property of the city. It was provided, however, that the person to whom the contract for construction of the road be let, should also agree to lease, equip and operate the railroad for a term of not less than thirty-five nor more than fifty years at an annual rent sufficient to pay the interest upon the bonds to be issued by the city and one per cent. in addition thereto. The Rapid Transit Board was authorized to determine all details of construction and operation and to supervise the construction and operation of the road. The statute also authorized the city to issue bonds in amount not exceeding $50,000,000 for the construction of the road.

The new Rapid Transit Board organized June 8, 1894; Alexander E. Orr was elected president; Henry R. Beekman and Albert B. Boardman were

appointed counsel, and William Barclay Parsons, chief engineer. Mr. Orr, who had been elected president of the Chamber of Commerce, and had thus become an *ex-officio* member of the board, as well as being named by the statute an individual member thereof, resigned the individual appointment and John H. Inman was elected by the board to fill the vacancy thus created.

Municipal Ownership of Subway. The Board quickly came to the conclusion that an effective solution of the transit problem could only be reached by the construction of underground railroads. In order to facilitate a determination of the question of public or private ownership, as required by the Statute, the board readopted the route and plans adopted by the board of 1891 and the question of private or municipal ownership was submitted to the electors of the city on November 6, 1894. The election showed an overwhelming majority in favor of municipal ownership, the vote being 132,647 in the affirmative to 42,916 in the negative. An action was brought by the Sun Printing & Publishing Company and others, as taxpayers, to enjoin the employment of city funds in subway construction, on the ground that the Act of 1894 was unconstitutional for various reasons. The courts, however, upheld the constitutionality of the act (Sun vs. Mayor, 8 App. Div. 230, 152 N. Y. 257).

Manhattan-Bronx Subway. In 1895 the Board adopted a route and plans and they were approved by the local authorities. Failing to secure the consents of property owners the board applied for the substituted consent of the General Term of the Supreme Court. Commissioners were appointed by the court, who reported in favor of the proposed road, but the court (May 22, 1896) unanimously refused to confirm the report of its Commissioners (matter of Rapid Transit Comm., 5 App. Div. 290). The reasons assigned were among others, that the road, when constructed, would not furnish a complete system of transit from one end of the city to the other, and that it was doubtful whether the road could be completed within the $50,000,000 limit or within the constitutional limit of municipal indebtedness.

January 14, 1897, the board adopted a new route and plans, modified with a view to meeting the courts' objections. It provided for the present route from the City Hall to Kingsbridge and The Bronx. December 17, 1897, the Appellate Division of the Supreme Court determined that the road ought to be constructed (Matter of Rapid Transit Comm., 23 App. Div. 472). The form of contract for construction was completed by the board March 31, 1898, and on April 7 was forwarded to the corporation council for his approval. That official held the contract without action for some seventeen months (till September 20, 1899). The assigned reason for this delay was the financial condition of the city. When the Greater New York Charter took effect January 1, 1898, the city assumed the debts of all the consolidated communities. The amount of their indebtedness could not for a time be accurately determined, but it was evident that the aggregate debt of the city was at least up to the constitutional limit of 10 per cent. on the assessed value of the real estate. This difficulty was but temporary, as the equalization and increase of assessed valuations throughout the various boroughs, together with a constitutional amendment excepting certain county debts from the 10 per cent. limitation, soon resulted in giving an ample debt margin for the construction of the proposed subway.

Legal and technical difficulties having thus been cleared away, the contract for construction and operation of the subway was executed February 21, 1900. March 24, 1900, the work of construction was formally begun in front of the City Hall, the mayor of the city turning the first spadeful of earth. October 27, 1904, the first train was run from the City Hall to One Hundred and Forty-fifth street, on the west side, and that portion of the subway was formally opened for traffic.

Brooklyn-Manhattan Subway. As soon as the contract had been let for the Manhattan-Bronx railway, the board took up the question of a railway to Brooklyn, which would serve to extend the Manhattan-Bronx subway from the Brooklyn bridge to the Battery and thence under the East river to the junction of Flatbush and Atlantic avenues in Brooklyn. The contract for the Brooklyn-Manhattan road was executed July 24, 1902. The road was opened for traffic from Brooklyn bridge to South Ferry, July 10, 1905.

Subway Plans. The Board foresaw that these two roads were but an installment of what was needed, and as soon as the Brooklyn-Manhattan contract was let the board took up the problem of laying out a comprehensive system of rapid transit for the whole city. The board believed that such a system should not be finally adopted until after a substantial part of the subway was in actual operation, so that the practical working of the system could be better understood. The first subway train was run on October 27, 1904, and in May and June of 1905 the board adopted and submitted to the city authorities comprehensive plans, embracing nineteen different routes, and reaching every borough of the city except Richmond.

Near the close of 1906 the board determined on the immediate construction of the Lexington avenue, Seventh and Eighth avenue and Jerome avenue routes. April 25, 1907, was the day set for opening bids for construction and operation, but no bids were received. The Interborough Rapid Transit Company, which was expected to submit a bid, sent a communication stating reasons why it seemed inadvisable to bid and submitted suggestions for changes in the form of contract and for alternative routes. The Brooklyn Loop lines were planned to connect with subways, the Brooklyn, Manhattan and Williamsburg bridges. In order to secure absolute control to the city it was decided to let the contract for construction without an operating lease. Contracts for the various sections of this subway were executed in April, May, and June of 1907. Consents of property owners having been secured for the Fourth avenue, Fort Hamilton, and Coney Island routes, plans and a form of contract, providing for construction only, were prepared and adopted by the board at its last meeting held June 27, 1907. July 1, 1907, the powers and duties of the board were transferred to the Public Service Commission for the First District in accordance with the provisions of Chapter 429 of the Laws of 1907. At the time that the Board of Rapid Transit Railroad Commissioners was superseded, it consisted of the following members: Alexander E. Orr, president, John H. Starin, vice-president, Woodbury Langdon, Charles Stewart Smith, William S. Hurley, Mayor George B. McClellan and Comptroller Herman A. Metz. George S. Rice was Chief Engineer of the board.

Rapid Transit Commissions in Brooklyn. When the rapid transit act was passed in 1875 there had already been organized under a charter and franchise granted by special act of the Legislature, the Brooklyn Elevated Silent

Safety Railway Company. The name of this company was changed in 1875 to the Brooklyn Elevated Railway Company. The company was authorized to construct an elevated railroad from Fulton ferry and Brooklyn bridge to Woodhaven without securing the consent of the local authorities. Owing to financial and legal difficulties construction was long delayed, and it was not until 1885 that a portion of its route was opened to traffic.

Brooklyn Commission of 1878. March 23, 1878, Mayor James Howell appointed a Board of Commissioners of Rapid Transit consisting of Felix Campbell, Charles J. Lowry, N. H. Clement, and John Y. Cuyler. The board organized April third by the election of Felix Campbell as president and John Y. Cuyler as secretary. John Newton was appointed consulting engineer. The board determined that there was great need of a comprehensive system of elevated steam roads and they laid out routes covering about twenty miles. The board submitted to the mayor reports of its proceedings, June 1, and July 1, 1878 (Documents 1878, Nos. 27, 32). Trouble was experienced in organizing a company to undertake construction. In the meantime on an application to the Common Council to approve the routes, the committee on railroads reported July eighth in favor of most of the routes. August first, however, the same committee made a report advising rejection of all the routes and this report was adopted. The Committee states that "it is not to the interest of Brooklyn, in view of the experience of the people living, doing business and owning property on Sixth avenue, New York, to permit our principal streets to be encumbered, and the property of our citizens on such streets ruined by the construction and operation of elevated railroads." When in December of 1878 the necessary subscriptions to capital stock were secured for the organization of the Kings County Elevated Railroad Company the question of granting consent again came before the common council. May 12, 1879, the committee on railroads of the common council reported in favor of consenting to the construction of elevated roads along the routes as laid out. A resolution was accordingly passed May 26, 1879. This resolution was vetoed by Mayor James Howell in a message transmitted June ninth. The mayor sums up his reasons for disapproval as follows:

> "1. Because the wholesale experiment you propose to make involves too much risk, and it may involve ruin to our local business interests.
>
> "2. For the great franchise you propose to bestow the city secures virtually nothing in return.
>
> "3. No provision is made for compensating private owners where property may be injured.
>
> "4. Your action throws a present cloud on property on streets which the Elevated Railway Company may build railroads upon, eventually, but which it is under no obligation to do at present."

June 30, 1879, the resolution of the council granting consent was passed over the mayor's veto. In 1880 the General Term of the Supreme Court refused to grant the necessary consent (Matter of Kings Co. Elevated Railway Co., 20 Hun, 217). In November, 1883, a new application was made to the common council and December twenty-eighth and December thirty-first (Proceedings 1883, vol. 2, pp. 822–853), the council granted its consent to the construction of a road along certain of the routes approved by the

Commission of 1878. This resolution was approved by Mayor Seth Low, January 10, 1884. The company having failed to construct the road within the time specified in the city's consent, a resolution rescinding its action of December 28, 1883, was passed March 23, 1885. The company, however, maintained that it could proceed under the franchise granted June 30, 1879. Actual construction was begun in 1886, but was speedily interrupted by judicial proceedings. A decision of the Court of Appeals March 22, 1887 (105 N. Y. 97) confirmed the validity of the franchise and April 24, 1888, a section was opened to traffic extending from Fulton ferry and Brooklyn bridge on the west to Nostrand avenue, a distance of three and one-quarter miles. December 5, 1888, the road was completed to the city line.

Brooklyn Commission of 1880. June 2, 1880, Mayor James Howell appointed a Board of Rapid Transit Commissioners consisting of John C. Perry, Hiram W. Hunt, William J. Osborne, Daniel T. Walden, and Alanson Tredwell. This commission adopted routes in part the same as those adopted by the commission of 1878. But instead of placing a large portion of the business streets of the city at the disposal of the corporation, only two of the business streets (one of which was Fulton) were so assigned. The Brooklyn Rapid Transit Company was organized to construct and operate the road. March 7, 1881 this company petitioned the common council for the approval of the routes laid out by the commission. The council, however, refused to grant its consent (Proceedings of the Board of Aldermen, 1881, vol. 2, p. 166).

Brooklyn Commission of 1881. In February, 1881, Mayor James Howell appointed five commissioners of rapid transit, as follows: Isaac Henderson, Samuel Hatton, Alanson Tredwell, Daniel T. Walden, and Aaron B. Cohn. This commission adopted a route and plans (Proceedings of the Board of Aldermen, 1881, vol. 1, p. 513; vol. 2, p. 526), and organized the East River Bridge and Coney Island Steam Transit Company. The consent of the local authorities was obtained by a resolution of the council adopted December 6, 1881, and approved December 17, 1881. The commissioners appointed by the Supreme Court approved the route in part (Proceedings of Board of Aldermen, 1881, vol. 2, p. 557), but their report was not approved by the General Term of the Supreme Court because no provision had been made requiring the company to reimburse property owners along the route for damages sustained by them (26 Hun, 490).

Brooklyn Commission of 1885. October 26, 1885, Mayor Seth Low appointed as commissioners of rapid transit the following persons: William H. Lyon, Joseph F. Knapp, George L. Morse, Michael H. Hagerty, and Charles E. Bill. These commissioners determined on routes and organized the Central Elevated Railway Company to construct the road. The company failed to secure a franchise and the project was abandoned.

Brooklyn Commissions of 1886. February 27, 1886, a rapid transit commission was appointed by Mayor D. D. Whitney, consisting of the following members: William J. Osborn, Chas. J. Tonjes, John F. Owings, Richard Lacy, and George W. Anderson. The commission laid out the following routes (Proceedings of Board of Aldermen, 1886, vol. 1, p. 1135):

(1) From East river to Lexington avenue via Broadway;

(2) From Washington street to city line via Myrtle avenue;

(3) From York street to Fulton street via Washington, Sands and Adams streets;

(4) From Park avenue to city line via Hudson, Flatbush and Fifth avenues.

June 14, 1886 the Union Elevated Railroad Company was organized to construct and operated these roads. The consent of the common council was granted July 12, 1886, and approved by the mayor July 16, 1886. By an agreement dated May 13, 1887, this company leased to the Brooklyn Elevated Railroad Company the various roads to be constructed by it, the lease to run from the date of their completion. The Union Elevated was merged with the Brooklyn Elevated, October 27, 1890.

March 6, 1886, Daniel D. Whitney, Mayor of Brooklyn, appointed five commissioners of rapid transit, as follows: Horatio C. King, William M. Cole, William L. B. Stears, Charles J. Henry, and William T. Lane. This commission adopted a route and plans and organized the Long Island Elevated Railway Company. The company was unable to secure the consent of the common council and the proposed road was not constructed.

Brooklyn Commission of 1888. February 4, 1888, a rapid transit commission consisting of Thomas S. Moore, George W. Almy, George W. Brown, Thomas McGrath, and Eugene Doherty, was appointed by Mayor Alfred C. Chapin under the act of 1875. June 2, 1888, the commission determined on a route from Sackman street and Fulton avenue to the town line of Jamaica, and the Fulton Elevated Railway Company was organized to construct the road. The company applied for the consent of the common council, November 12, 1888 (Proceedings, p. 944). A resolution granting consent was passed by the council December tenth (Proceedings, p. 1263), and approved by the mayor December 18, 1888. The road when constructed was immediately leased to the King County Elevated Railway Company.

Brooklyn Commission of 1889. Commissioners of Rapid Transit were appointed by the mayor of Brooklyn, December 10, and 23, 1889, and by resolution of the board of supervisors of Kings county, December 26, 1889. Routes were laid out six miles in length and the Sea Side and Brooklyn Bridge Elevated Railroad Company was organized to construct and operate the roads. The consent of the common council was secured, February 20, 1891 (Proceedings, 1891, p. 439). By an agreement dated August 1, 1892, this company leased to the Brooklyn Elevated Railroad Company the roads to be constructed by it, the various sections of road to be delivered to lessee as they were completed. A section of the road from Fulton street to Jamaica avenue via Crescent avenue was delivered to the lessee May 30, 1893; from Thirty-eighth street to Sixty-seventh street via Thirty-eighth street and Third avenue, October 1, 1893; from Adams to Sands streets via High and Fulton streets, June 14, 1896.

APPENDIX K.

PUBLIC SERVICE COMMISSIONS ACT.

APPENDIX K.

PUBLIC SERVICE COMMISSIONS ACT.

CHAP. 429.

AN ACT to establish the public service commissions and prescribing their powers and duties, and to provide for the regulation and control of certain public service corporations and making an appropriation therefor.

Became a law, June 6, 1907, with the approval of the Governor. Passed, three-fifths being present.

Passed without the acceptance of the city of New York.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

THE PUBLIC SERVICE COMMISSIONS LAW.

Article I. Public service commissions; general provisions (§§ 1–23).
II. Provisions relating to railroads, street railroads and common carriers (§§ 25–40).
III. Provisions relating to the powers of the commissions in respect to railroads, street railroads and common carriers (§§ 45–60).
IV. Provisions relating to gas and electric corporations; regulation of price of gas and electricity (§§ 65–77).
V. Commissions and offices abolished; saving clause; repeal (§§ 80–89).

ARTICLE I.

PUBLIC SERVICE COMMISSIONS; GENERAL PROVISIONS.

Section 1. Short title.
2. Definitions.
3. Public service districts.
4. Commissions established; appointment; removal; terms of office.
5. Jurisdiction of commissions.
6. Counsel to the commissions.
7. Secretary to the commissions.
8. Additional officers and employees.
9. Oath of office; eligibility of commissioners and officers.
10. Offices of commissions; meetings; official seal; stationery.
11. Quorum; powers of a commissioner.
12. Counsel to the commissions; duties.
13. Salaries and expenses.
14. Payment of salaries and expenses.
15. Certain acts prohibited.
16. Annual report of commissions.

Section 17. Certified copies of papers filed to be evidence.
18. Fees to be charged and collected by the commissions.
19. Attendance of witnesses and their fees.
20. Practice before the commissions; immunity of witnesses.
21. Court proceedings; preference.
22. Rehearing before commission.
23. Service and effect of orders.

Section 1. **Short title.**— This chapter shall be known as the public service commissions law, and shall apply to the public services herein described, and to the commissions hereby created.

§ 2. **Definitions.**— The term "commission," when used in this act, means either public service commission, hereby created, which by the terms of this act is vested with the power or duty in question.

The term "commissioner," when used in this act, means one of the members of such commission.

The term "corporation," when used in this act, includes a corporation, company, association and joint-stock association.

The word "person," when used in this act, includes an individual and a firm or copartnership.

The term "street railroad," when used in this act, includes every railroad by whatsoever power operated, or any extension or extensions, branch or branches thereof, for public use in the conveyance of persons or property for compensation, being mainly upon, along, above or below any street, avenue, road, highway, bridge or public place in any city, village or town, and including all switches, spurs, tracks, right of trackage, subways, tunnels, stations, terminals and terminal facilities of every kind used, operated, controlled or owned by or in connection with any such street railroad; but the said term "street railroad," when used in this act, shall not include a railroad constituting or used as part of a trunk line railroad system.

The term "railroad," when used in this act, includes every railroad, other than a street railroad, by whatsoever power operated for public use in the conveyance of persons or property for compensation, with all bridges, ferries, tunnels, switches, spurs, tracks, stations and terminal facilities of every kind used, operated, controlled or owned by or in connection with any such railroad.

The term "street railroad corporation," when used in this act, includes every corporation, company, association, joint-stock association, partnership and person, their lessees, trustees or receivers appointed by any court whatsoever, owning, operating, managing or controlling any street railroad or any cars or other equipment used thereon or in connection therewith.

The term "railroad corporation," when used in this act, includes every corporation, company, association, joint-stock association, partnership and person, their lessees, trustees or receivers appointed by any court whatsoever, owning, operating, managing or controlling any railroad or any cars or other equipment used thereon or in connection therewith.

The term "common carrier," when used in this act, includes all railroad corporations, street railroad corporations, express companies, car companies, sleeping-car companies, freight companies, freight-line companies and all

persons and associations of persons, whether incorporated or not, operating such agencies for public use in the conveyance of persons or property within this state.

The term "gas corporation," when used in this act, includes every corporation, company, association, joint-stock association, partnership and person, their lessees, trustees or receivers appointed by any court whatsoever, owning, operating, managing or controlling any plant or property for manufacturing and distributing and selling for distribution or distributing illuminating gas (natural or manufactured) for light, heat or power.

The term "electrical corporation," when used in this act, includes every corporation, company, association, joint-stock association, partnership and person, their lessees, trustees or receivers appointed by any court whatsoever (other than a railroad or street railroad corporation generating electricity for its own use exclusively), owning, operating, managing or controlling any plant or property for generating and distributing, or generating and selling for distribution, or distributing electricity for light, heat or power or for the transmission of electric current for such purposes.

The term "transportation of property or freight," when used in this act, includes any service in connection with the receiving, delivery, elevation, transfer in transit, ventilation, refrigeration, icing, storage and handling of the property or freight transported.

The term "municipality," when used in this act, includes a city, village, town or lighting district, organized as provided by a general or special act.

§ 3. **Public service districts.**— There are hereby created two public service districts, to be known as the first district and the second district. The first district shall include the counties of New York, Kings, Queens and Richmond. The second district shall include all other counties of the state.

§ 4. **Commissions established; appointment; removal; terms of office.**— There shall be a public service commission for each district, and each commission shall possess the powers and duties hereinafter specified, and also all powers necessary or proper to enable it to carry out the purposes of this act. The commission of the first district shall consist of five members and the commission of the second district shall consist of five members, to be appointed by the governor, by and with the advice and consent of the senate, one of whom designated by the governor shall, during his term of office, be the chairman of the commission of which he is a member. Each commissioner shall be a resident of the district for which he is appointed.

The governor may remove any commissioner for inefficiency, neglect of duty or misconduct in office, giving to him a copy of the charges against him, and an opportunity of being publicly heard in person or by counsel in his own defense, upon not less than ten days notice. If such commissioner shall be removed the governor shall file in the office of the secretary of state a complete statement of all charges made against such commissioner, and his findings thereon, together with a complete record of the proceedings.

Of the members of the commission in each district first appointed hereunder, one shall hold office until February first, nineteen hundred and nine, one until February first, nineteen hundred and ten, one until February first, nineteen hundred and eleven, one until February first, nineteen hundred and twelve, and one until February first, nineteen hundred and thirteen;

the term of office of each commissioner so appointed shall begin on the first day of July, nineteen hundred and seven. Upon the expiration of each of such terms, the term of office of each commissioner thereafter appointed shall be five years from the first of February. Vacancies shall be filled by appointment for the unexpired term.

§ 5. **Jurisdiction of commissions.**— The jurisdiction, supervision, powers and duties of the public service commission in the first district shall extend under this act:

1. To railroads and street railroads lying exclusively within that district, and to the persons or corporations owning, leasing, operating or controlling the same.

2. To street railroads any portion of whose lines lies within that district, to all transportation of persons or property thereon within that district or from a point within either district to a point within the other district, and to the persons or corporations owning, operating, controlling or leasing the said street railroads; provided, however, that the commission for the second district shall have jurisdiction over such portion of the lines of said street railroads as lies within the second district, and over the persons or corporations owning, operating, controlling or leasing the same, so far as concerns the construction, maintenance, equipment, terminal facilities and local transportation facilities of said street railroads within the second district.

3. To such portion of the lines of any other railroad as lies within that district, and to the person or corporation owning, leasing, operating or controlling the same, so far as concerns the construction, maintenance, equipment, terminal facilities and local transportation facilities, and local transportation of persons or property within that district.

4. To any common carrier operating or doing business exclusively within that district.

5. To the manufacture, sale or distribution of gas and electricity for light, heat and power in said district, and to the persons or corporations owning, leasing, operating or controlling the same.

6. And in addition thereto, the commission in the first district shall have and exercise all powers heretofore conferred upon the board of rapid transit railroad commissioners under chapter four of the laws of eighteen hundred and ninety-one, entitled "An act to provide for rapid transit railways in cities of over one million inhabitants," and the acts amendatory thereto.

All jurisdiction, supervision, powers and duties under this act not specifically granted to the public service commission of the first district shall be vested in, and be exercised by, the public service commission of the second district, including the regulation and control of all transportation of persons or property, and the instrumentalities connected with such transportation, on any railroad other than a street railroad from a point within either district to a point within the other district.

§ 6. **Counsel to the commissions.**— Each commission shall appoint as counsel to the commission an attorney and counselor-at-law of the state of New York, who shall hold office during the pleasure of the commission. Each counsel to the commission shall, subject to the approval of the commission, have the power to appoint, and at pleasure remove, attorneys and counselors-at-law, to assist him in the performance of his duties, and also to employ and remove stenographers and process-servers.

§ 7. **Secretary to the commissions.**— Each commission shall have a secretary to be appointed by it and to hold office during its pleasure. It shall be the duty of the secretary to keep a full and true record of all proceedings of the commission, of all books, maps, documents and papers ordered filed by the commission and of all orders made by a commissioner and of all orders made by the commission or approved and confirmed by it and ordered filed, and he shall be responsible to the commission for the safe custody and preservation of all such documents at its office. Under the direction of the commission the secretary shall have general charge of its office, superintend its clerical business and perform such other duties as the commission may prescribe. He shall have power and authority to administer oaths in all parts of the state, so far as the exercise of such power is properly incidental to the performance of his duty or that of the commission. The secretary shall designate, from time to time, one of the clerks appointed by the commission to perform the duties of secretary during his absence and, during such time, the clerk so designated shall at the office possess the powers of the secretary of the commission.

§ 8. **Additional officers and employees.**— Each commission shall have power to employ, during its pleasure, such officers, clerks, inspectors, experts and employees as it may deem to be necessary to carry out the provisions of this act, or to perform the duties and exercise the powers conferred by law upon the commission.

§ 9. **Oath of office; eligibility of commissioners and officers.**— Each commissioner and each person appointed to office by a commission or by counsel to a commision shall, before entering upon the duties of his office, take and subscribe the constitutional oath of office. No person shall be eligible for appointment or shall hold the office of commissioner or be appointed by a commission or by counsel to a commission to, or hold, any office or position under a commission, who holds any official relation to any common carrier, railroad corporation, street railroad corporation, gas corporation or electrical corporation subject to the provisions of this act, or who owns stocks or bonds therein.

§ 10. **Offices of commissions; meetings; official seal; stationery, etc.**— 1. The principal office of the commission of the first district shall be in the borough of Manhattan, city of New York; and the office of the second district shall be in the city of Albany, in rooms designated by the trustees of public buildings. Each commission shall hold stated meetings at least once a month during the year at its office. Each shall have an official seal to be furnished and prepared by the secretary of state as provided by law. The offices shall be supplied with all necessary books, maps, charts, stationery, office furniture, telephone and telegraph connections and all other necessary appliances, to be paid for in the same manner as other expenses authorized by this act.

2. The offices of each commission shall be open for business between the hours of eight o'clock in the morning and eleven o'clock at night every day in the year, and one or more responsible persons, to be designated by the commission or by the secretary under the direction of the commission, shall be on duty at all times in immediate charge thereof.

§ 11. **Quorum; powers of a commissioner.**— A majority of the commissioners shall constitute a quorum for the transaction of any business, for the

performance of any duty or for the exercise of any power of the commission, and may hold meetings of the commission at any time or place within the state. Any investigation, inquiry or hearing which either commission has power to undertake or to hold may be undertaken or held by or before any commissioner. All investigations, inquiries, hearings and decisions of a commissioner shall be and be deemed to be the investigations, inquiries, hearings and decisions of the commission and every order made by a commissioner, when approved and confirmed by the commission and ordered filed in its office, shall be and be deemed to be the order of the commission.

§ 12. **Counsel to the commissions; duties.**— It shall be the duty of counsel to a commission to represent and appear for the people of the state of New York and the commission in all actions and proceedings involving any question under this act, or under or in reference to any act or order of the commission, and, if directed to do so by the commission, to intervene, if possible, in any action or proceeding in which any such question is involved; to commence and prosecute all actions and proceedings directed or authorized by the commission, and to expedite in every way possible final determination of all such actions and proceedings; to advise the commission and each commissioner when so requested in regard to all matters in connection with the powers and duties of the commission and of the members thereof, and generally to perform all duties and services as attorney and counsel to the commission which the commission may reasonably require of him.

§ 13. **Salaries and expenses.**— The annual salary of each commissioner shall be fifteen thousand dollars ($15,000). The annual salary of counsel to a commission shall be ten thousand dollars ($10,000). The annual salary of a secretary to a commission shall be six thousand dollars ($6,000). All officers, clerks, inspectors, experts and employees of a commission, and all persons appointed by the counsel to a commission, shall receive the compensation fixed by the commission.

The commissioners, counsel to the commission and the secretary, and their officers, clerks, inspectors, experts and other employees, shall have reimbursed to them all actual and necessary traveling and other expenses and disbursements incurred or made by them in the discharge of their official duties.

§ 14. **Payment of salaries and expenses.**— 1. The salaries of the commissioners, the counsel to the commission, and the secretary to the commission in the first district shall be audited and allowed by the state comptroller, and paid monthly by the state treasurer upon the order of the comptroller out of the funds provided therefor. All other salaries and expenses of the commission of the first district shall be audited and paid as follows: The board of estimate and apportionment of the city of New York, or other board or public body on which is imposed the duty and in which is vested the power of making appropriations of public moneys for the purposes of the city government shall, from time to time, on requisition duly made by the public service commission of the first district, appropriate such sum or sums of money as may be requisite and necessary to enable it to do and perform, or cause to be done and performed, the duties in this or in any other act prescribed, and to provide for the expenses and the compensation of the employees of such commission, and such appropriation shall be made forthwith upon presentation of a requisition from the said commission, which

shall state the purposes for which such moneys are required by it. In case the said board of estimate and apportionment, or such other board or public body, fail to appropriate such amount as the said commission deems requisite and necessary, the said commission may apply to the appellate division of the supreme court in the first department, on notice to the board of estimate and apportionment or such other board or public body aforesaid, to determine what amount shall be appropriated for the purposes so required and the decision of said appellate division shall be final and conclusive; and the city shall not be liable for any indebtedness incurred by the said commission in excess of such appropriation or appropriations. It shall be the duty of the auditor and comptroller of said city, after such appropriation shall have been duly made, to audit and pay the proper expenses and compensation of the employees of said commission other than its counsel and secretary, upon vouchers therefor, to be furnished by the said commission, which payments shall be made in like manner as payments are now made by the auditor, comptroller or other public officers of claims against and demands upon such city; and for the purpose of providing funds with which to pay the said sums, the comptroller or other chief financial officer of said city, is hereby authorized and directed to issue and sell revenue bonds of such city in anticipation of receipt of taxes and out of the proceeds of such bonds to make the payments in this section required to be made. The amount necessary to pay the principal and interest of such bonds shall be included in the estimates of moneys necessary to be raised by taxation to carry on the business of said city, and shall be made a part of the tax levy for the year next following the year in which such appropriations are made. The commission may provide that all or any portion of the expenses so incurred and paid by said city as in this section provided, and for which said city shall be liable, shall be repaid, with interest, by the bidder or bidders at the public sale of the rights, privileges and franchises, as provided in chapter four of the laws of eighteen hundred and ninety-one, entitled "An act to provide for rapid transit railways in cities of over one million inhabitants," and the acts amendatory thereto. The said comptroller shall pay the proper salaries and the expenses of the said commission upon its requisition, for the remainder of the fiscal year after this act shall take effect, from any funds that may have been heretofore appropriated for the board of rapid transit railroad commissioners, which appropriation is hereby transferred to the credit of the public service commission of the first district. In case the said appropriation shall not be sufficient to meet such salaries and expenses, the comptroller of said city is hereby authorized and directed to issue and sell revenue bonds of said city, in anticipation of receipt of taxes, as hereinbefore provided.

2. All salaries and expenses of the commission in the second district shall be audited and allowed by the state comptroller and paid monthly by the state treasurer upon the order of the comptroller, out of the funds provided therefor.

§ 15. Certain acts prohibited.— Every commissioner, counsel to a commission, the secretary of a commission, and every person employed or appointed to office, either by a commission or by the counsel to a commission, is hereby forbidden and prohibited to solicit, suggest, request or recommend, directly or indirectly, to any common carrier, railroad corporation or street

railroad corporation, or to any officer, attorney, agent or employee thereof, the appointment of any person to any office, place, position or employment. And every common carrier, railroad corporation, street railroad corporation, gas corporation and electrical corporation and every officer, attorney, agent and employee thereof, is hereby forbidden and prohibited to offer to any commissioner, to counsel to a commission, to the secretary thereof, or to any person employed by a commission or by the counsel to a commission, any office, place, appointment or position, or to offer or give to any commissioner, to counsel to a commission, to the secretary thereof, or to any officer employed or appointed to office by the commission or by the counsel to the commission, any free pass or transportation or any reduction in fare to which the public generally are not entitled or free carriage for freight or property or any present, gift or gratuity of any kind. If any commissioner, counsel to a commission, the secretary thereof or any person employed or appointed to office by a commission or by counsel to a commission, shall violate any provision of this section he shall be removed from the office held by him. Every commissioner, counsel to the commission, the secretary thereof and every person employed or appointed to office by the commission or by counsel to the commission, shall be and be deemed to be a public officer.

§ 16. **Annual report of commissions.**— All proceedings of each commission and all documents and records in its possession shall be public records, and each commission shall make an annual report to the legislature on or before the second Monday of January in each year, which shall contain copies of all orders issued by it, and any information in the possession of the commission which it shall deem of value to the legislature and the people of the state. Five hundred copies of each report, together with abstracts of the reports to such commission of common carriers, railroad corporations and street railroad corporations, and gas and electrical corporations, in addition to the regular number prescribed by law, shall be printed as a public document of the state, bound in cloth, for the use of the commissioners and to be distributed by them in their discretion to railroad, street railroad, gas and electrical corporations and other persons interested therein.

§ 17. **Certified copies of papers filed to be evidence.**— Copies of all official documents and orders filed or deposited according to law in the office of either commission, certified by a commissioner or by the secretary of the commission to be true copies of the originals, under the official seal of the commission, shall be evidence in like manner as the originals.

§ 18. **Fees to be charged and collected by the commissions.**— Each commission shall charge and collect the following fees: For copies of papers and records not required to be certified or otherwise authenticated by the commission, ten cents for each folio; for certified copies of official documents and orders filed in its office, fifteen cents for each folio, and one dollar for every certificate under seal affixed thereto; for certifying a copy of any report made by a corporation to the commission, two dollars; for each certified copy of the annual report of the commission, one dollar and fifty cents; for certified copies of evidence and proceedings before the commission, fifteen cents for each folio. No fees shall be charged or collected for copies of papers, records or official documents, furnished to public officers for use in their official capacity, or for the annual reports of the commission in the ordinary course of distribution. All fees charged and collected by the

commission of the first district shall belong to the city of New York, and shall be paid monthly, accompanied by a detailed statement thereof, into the treasury of the city to the credit of the general fund, and all fees charged and collected by the commission of the second district shall belong to the people of the state, and shall be paid monthly, accompanied by a detailed statement thereof, into the treasury of the state to the credit of the general fund.

§ 19. **Attendance of witnesses and their fees.**— 1. All subpoenas shall be signed and issued by a commissioner or by the secretary of a commission and may be served by any person of full age. The fees of witnesses required to attend before a commission, or a commissioner, shall be two dollars for each day's attendance, and five cents for every mile of travel by the nearest generally traveled route in going to and from the place where attendance of the witness is required, such fees to be paid when the witness is excused from further attendance; and the disbursements made in the payment of such fees shall be audited and paid in the first district in the same manner provided for the payment of expenses of the commission.

2. If a person subpoenaed to attend before a commission, or a commissioner fails to obey the command of such subpoena, without reasonable cause, or if a person in attendance before a commission, or commissioner, shall, without reasonable cause, refuse to be sworn or to be examined or to answer a question or to produce a book or papers, when ordered so to do by the commission, or a commissioner, or to subscribe and swear to his deposition after it has been correctly reduced to writing, he shall be guilty of a misdemeanor and may be prosecuted therefor in any court of competent criminal jurisdiction.

If a person in attendance before a commission or a commissioner refuses without reasonable cause to be examined or to answer a legal and pertinent question or produce a book or paper, when ordered so to do by a commission or a commissioner, the commission may apply to any justice of the supreme court upon proof by affidavit of the facts for an order returnable in not less than two nor more than five days directing such person to show cause before the justice who made the order, or any other justice of the supreme court, why he should not be committed to jail; upon the return of such order the justice before whom the matter shall come on for hearing shall examine under oath such person whose testimony may be relevant, and such person shall be given an opportunity to be heard; and if the justice shall determine that such person has refused without reasonable cause or legal excuse to be examined, or to answer a legal and pertinent question, or to produce a book or paper which he was ordered to bring, he may forthwith, by warrant, commit the offender to jail, there to remain until he submits to do the act which he was so required to do or is discharged according to law.

§ 20. **Practice before the commissions; immunity of witnesses.**— All hearings before a commission or a commissioner, shall be governed by rules to be adopted and prescribed by the commission. And in all investigations, inquiries or hearings the commission, or a commissioner, shall not be bound by the technical rules of evidence. No person shall be excused from testifying or from producing any books or papers in any investigation or inquiry by or upon any hearing before a commission or any commissioner, when

ordered to do so by the commission, upon the ground that the testimony or evidence, books or documents required of him may tend to incriminate him or subject him to penalty or forfeiture, but no person shall be prosecuted, punished or subjected to any penalty or forfeiture for or on account of any act, transaction, matter or thing concerning which he shall under oath have testified or produced documentary evidence; provided, however, that no person so testifying shall be exempt from prosecution or punishment for any perjury committed by him in his testimony. Nothing herein contained is intended to give, or shall be construed as in any manner giving unto any corporation immunity of any kind.

§ 21. **Court proceedings; preferences.**— All actions and proceedings under this act, and all actions and proceedings commenced or prosecuted by order of either commission, and all actions and proceedings to which either commission or the people of the state of New York may be parties, and in which any question arises under this act or under the railroad law, or under or concerning any order or action of the commission, shall be preferred over all other civil causes except election causes in all courts of the state of New York and shall be heard and determined in preference to all other civil business pending therein excepting election causes, irrespective of position on the calendar. The same preference shall be granted upon application of counsel to the commission in any action or proceeding in which he may be allowed to intervene.

§ 22. **Rehearing before commission.**— After an order has been made by a commission any party interested therein may apply for a rehearing in respect to any matter determined therein, and the commission may grant and hold such a rehearing if in its judgment sufficient reason therefor be made to appear; if a rehearing shall be granted, the same shall be determined by the commission within thirty days after the same shall be finally submitted. An application for such a rehearing shall not excuse any common carrier, railroad corporation or street railroad corporation from complying with or obeying any order or any requirement of any order of the commission, or operate in any manner to stay or postpone the enforcement thereof except as the commission may by order direct. If, after such rehearing and a consideration of the facts, including those arising since the making of the order, the commission shall be of opinion that the original order or any part thereof is in any respect unjust or unwarranted, the commission may abrogate, change or modify the same. An order made after any such rehearing abrogating, changing or modifying the original order shall have the same force and effect as an original order but shall not affect any right or the enforcement of any right arising from or by virtue of the original order.

§ 23. **Service and effect of orders.**— Every order of a commission shall be served upon every person or corporation to be affected thereby, either by personal delivery of a certified copy thereof, or by mailing a certified copy thereof, in a sealed package with postage prepaid, to the person to be affected thereby or, in the case of a corporation, to any officer or agent thereof upon whom a summons may be served in accordance with the provisions of the code of civil procedure. It shall be the duty of every person and corporation to notify the commission forthwith, in writing, of the receipt of the certified copy of every order so served, and in the case of a

corporation such notification must be signed and acknowledged by a person or officer duly authorized by the corporation to admit such service. Within a time specified in the order of the commission every person and corporation upon whom it is served must if so required in the order notify the commission in like manner whether the terms of the order are accepted and will be obeyed.

Every order of a commission shall take effect at a time therein specified and shall continue in force for a period therein designated unless earlier modified or abrogated by the commission or unless such order be unauthorized by this or any other act or be in violation of a provision of the constitution of the state or of the United States.

ARTICLE II.

PROVISIONS RELATING TO RAILROADS, STREET RAILROADS AND COMMON CARRIERS.

Section 25. Application of article.
26. Adequate service; just and reasonable charges.
27. Switch and side-track connections; powers of commissions.
28. Tariff schedules; publication.
29. Changes in schedule; notice required.
30. Concurrence in joint tariffs; contracts, agreements or arrangements between any carriers.
31. Unjust discrimination.
32. Unreasonable preference.
33. Transportation prohibited until publication of schedules; rates as fixed to be charged; passes prohibited.
34. False billing, etc., by carrier or shipper.
35. Discrimination prohibited; connecting lines.
36. Long and short haul.
37. Distribution of cars.
38. Liability for damage to property in transit.
39. Continuous carriage.
40. Liability for loss or damage by violation of this act.

§ 25. **Application of article.**— The provisions of this article shall apply to the transportation of passengers, freight or property, from one point to another within the state of New York, and to any common carrier performing such service.

§ 26. **Safe and adequate service; just and reasonable charges.**— Every corporation, person or common carrier performing a service designated in the preceding section, shall furnish, with respect thereto, such service and facilities as shall be safe and adequate and in all respects just and reasonable. All charges made or demanded by any such corporation, person or common carrier for the transportation of passengers, freight or property or for any service rendered or to be rendered in connection therewith, as defined in section two of this act, shall be just and reasonable and not more than allowed by law or by order of the commission having jurisdiction and made as authorized by this act. Every unjust or unreasonable charge made or de-

manded for any such service or transportation of passengers, freight or property or in connection therewith or in excess of that allowed by law or by order of the commission is prohibited.

§ 27. **Switch and side track connections; powers of commissions.**— 1. A railroad corporation, upon the application of any shipper tendering traffic for transportation, shall construct, maintain and operate upon reasonable terms a switch connection or connections with a lateral line of railroad or private sidetrack owned, operated or controlled by such shipper, and shall, upon the application of any shipper, provide upon its own property a sidetrack and switch connection with its line of railroad, whenever such sidetrack and switch connection is reasonably practicable, can be put in with safety and the business therefor is sufficient to justify the same.

2. If any railroad corporation shall fail to install or operate any such switch connection with a lateral line of railroad or any such sidetrack and switch connection as aforesaid, after written application therefor has been made to it, any corporation or person interested may present the facts to the commission having jurisdiction by written petition, and the commission shall investigate the matter stated in such petition, and give such hearing thereon as it may deem necessary or proper. If the commission be of opinion that it is safe and practicable to have a connection, substantially as prayed for, established or maintained, and that the business to be done thereon justifies the construction and maintenance thereof, it shall make an order directing the construction and establishment thereof, specifying the reasonable compensation to be paid for the construction, establishment and maintenance thereof, and may in like manner upon the application of the railroad corporation order the discontinuance of such switch connection.

§ 28. **Tariff schedules; publication.**— Every common carrier shall file with the commission having jurisdiction and shall print and keep open to public inspection schedules showing the rates, fares and charges for the transportation of passengers and property within the state between each point upon its route and all other points thereon; and between each point upon its route and all points upon every route leased, operated or controlled by it; and between each point on its route or upon any route leased, operated or controlled by it and all points upon the route of any other common carrier, whenever a through route and joint rate shall have been established or ordered between any two such points. If no joint rate over a through route has been established, the several carriers in such through route shall file, print and keep open to public inspection, as aforesaid, the separately established rates, fares and charges applied to the through transportation. The schedules printed as aforesaid shall plainly state the places between which property and passengers will be carried, and shall also contain the classification of passengers, freight or property in force, and shall also state separately all terminal charges, storage charges, icing charges, and all other charges which the commission may require to be stated, all privileges or facilities granted or allowed, and any rules or regulations which may in any wise change, affect or determine any part, or the aggregate of, such aforesaid rates, fares and charges, or the value of the service rendered to the passenger, shipper or consignee. Such schedules shall be plainly printed in large type; copies thereof for the use of the public shall be kept posted in two public and conspicuous places in every depot, station and office of every

common carrier where passengers or property are received for transportation, in such manner as to be readily accessible to and conveniently inspected by the public. The form of every such schedule shall be prescribed by the commission and shall conform as nearly as possible to the form of schedule required by the interstate commerce commission under the act of congress, entitled: "An act to regulate commerce," approved February fourth, eighteen hundred and eighty-seven, as amended by act approved June twenty-ninth, nineteen hundred and six, and other amendments thereto. Where any similar schedule is required by law to be filed with both commissions they shall agree upon an identical form for such schedule. The commission shall have power, from time to time, in its discretion, to determine and prescribe by order such changes in the form of such schedules as may be found expedient.

§ 29. **Changes in schedule; notice required.**— Unless the commission otherwise orders no change shall be made in any rate, fare or charge, or joint rate, fare or charge, which shall have been filed and published by a common carrier in compliance with the requirements of this act, except after thirty days' notice to the commission and publication for thirty days as required by section twenty-eight of this act, which shall plainly state the changes proposed to be made in the schedule then in force, and the time when the changed rate, fare or charge will go into effect; and all proposed changes shall be shown by printing, filing and publishing new schedules or shall be plainly indicated upon the schedules in force at the time and kept open to public inspection. The commission, for good cause shown, may allow changes in rates without requiring the thirty days' notice and publication herein provided for, by duly filing and publishing in such manner as it may direct an order specifying the change so made and the time when it shall take effect; all such changes shall be immediately indicated upon its schedules by the common carrier.

§ 30. **Concurrence in joint tariffs; contracts, agreements or arrangements between any carriers.**— 1. The names of the several carriers which are parties to any joint tariff shall be specified therein, and each of the parties thereto, other than the one filing the same, shall file with the commission such evidence of concurrence therein or acceptance thereof as may be required or approved by the commission; and where such evidence of concurrence or acceptance is filed, it shall not be necessary for the carriers filing the same also to file copies of the tariffs in which they are named as parties.

2. Every common carrier shall file with the commission sworn copies of every contract, agreement or arrangement with any other common carrier or common carriers relating in any way to the transportation of passengers, property or freight.

§ 31. **Unjust discrimination.**— No common carrier shall, directly or indirectly, by any special rate, rebate, drawback, or other device or method, charge, demand, collect or receive from any person or corporation a greater or less compensation for any service rendered or to be rendered in the transportation of passengers, freight or property, except as authorized in this act, than it charges, demands, collects or receives from any other person or corporation for doing a like and contemporaneous service in the transportation of a like kind of traffic under the same or substantially similar circumstances and conditions.

§ 32. **Unreasonable preference.**— No common carrier shall make or give any undue or unreasonable preference or advantage to any person or corporation or to any locality or to any particular description of traffic in any respect whatsoever, or subject any particular person or corporation or locality or any particular description of traffic, to any prejudice or disadvantage in any respect whatsoever.

§ 33. **Transportation prohibited until publication of schedules; rates as fixed to be charged; passes prohibited.**— No common carrier subject to the provisions of this act shall after the first day of November, nineteen hundred and seven, engage or participate in the transportation of passengers, freight or property, between points within the state, until its schedules of rates, fares and charges shall have been filed and published in accordance with the provisions of this act. No common carrier shall charge, demand, collect or receive a greater or less or different compensation for transportation of passengers, freight or property, or for any service in connection therewith, than the rates, fares and charges applicable to such transportation as specified in its schedules filed and in effect at the time; nor shall any such carrier refund or remit in any manner or by any device any portion of the rates, fares, or charges so specified, nor extend to any shipper or person any privileges or facilities in the transportation of passengers or property except such as are regularly and uniformly extended to all persons and corporations under like circumstances. No common carrier subject to the provisions of this act shall, directly or indirectly, issue or give any free ticket, free pass or free transportation for passengers or property between points within this state, except to its officers, employees, agents, pensioners, surgeons, physicians, attorneys-at-law, and their families; to ministers of religion, officers and employees of railroad young men's Christian associations, inmates of hospitals, charitable and eleemosynary institutions and persons exclusively engaged in charitable and eleemosynary work; and to indigent, destitute and homeless persons and to such persons when transported by charitable societies or hospitals, and the necessary agents employed in such transportation; to inmates of the national homes or state homes for disabled volunteer soldiers and of soldiers' and sailors' homes, including those about to enter and those returning home after discharge, and boards of managers of such homes; to necessary caretakers of property in transit; to employees of sleeping-car companies, express companies, telegraph and telephone companies doing business along the line of the issuing carrier; to railway mail service employees, post-office inspectors, customs inspectors and immigration inspectors; to newsboys on trains, baggage agents, witnesses attending any legal investigation or proceeding in which the common carrier is interested, persons injured in accidents or wrecks and physicians and nurses attending such persons; to the carriage free or at reduced rates of persons or property for the United States, state or municipal governments, or of property to or from fairs and expositions for exhibit thereat. Nothing in this act shall be construed to prohibit the interchange of free or reduced transportation between common carriers of or for their officers, agents, employees, attorneys and surgeons and their families, nor to prohibit any common carrier from carrying passengers or property free, with the object of providing relief in cases of general epidemic, pestilence or other calamitous visitation; nor to prohibit any common carrier from transporting persons or property as

incident to or connected with contracts for construction, operation or maintenance, and to the extent only that such free transportation is provided for in the contract for such work.

Provided further, that nothing in this act shall prevent the issuance of mileage, excursion, or commutation passenger tickets, or joint interchangeable mileage tickets, with special privileges as to the amount of free baggage that may be carried under mileage tickets of one thousand miles or more. But before any common carrier, subject to the provision of this act, shall issue any such mileage, excursion, commutation passenger ticket or joint interchangeable mileage ticket, with special privileges as aforesaid, it shall file with the commission copies of the tariffs of rates, fares or charges on which such tickets are to be based, together with the specifications of the amount of free baggage permitted to be carried under such joint interchangeable mileage ticket, in the same manner as common carriers are required to do with regard to other rates by this act. Nor shall anything in this act prevent the issuance of passenger transportation in exchange for advertising space in newspapers at full rates.

§ 34. **False billing, etc., by carrier or shipper.**— No common carrier or any officer or agent thereof or any person acting for or employed by it, shall assist, suffer or permit any person or corporation to obtain transportation for any passenger, freight or property between points within this state at less than the rates then established and in force in accordance with the schedules filed and published in accordance with the provisions of this act, by means of false billing, false classification, false weight or weighing, or false report of weight, or by any other device or means. No person, corporation or any officer, agent or employee of a corporation, who shall deliver freight or property for transportation within the state to a common carrier, shall seek to obtain or obtain such transportation for such property at less than the rates then established and in force therefor, as aforesaid, by false billing, false or incorrect classification, false weight or weighing, false representation of the contents of a package, or false report or statement of weight, or by any other device or means, whether with or without the consent or connivance of the common carrier, or any of its officers, agents or employees.

§ 35. **Discrimination prohibited; connecting lines.**— Every common carrier is required to afford all reasonable, proper and equal facilities for the interchange of passenger, freight and property traffic between the lines owned, operated, controlled or leased by it and the lines of every other common carrier, and for the prompt transfer of passengers and for the prompt receipt and forwarding of freight and property to and from its said lines; and no common carrier shall in any manner discriminate in respect to rates, fares or charges or in respect to any service or in respect to any charges or facilities for any such transfer in receiving or forwarding between any two or more other common carriers or between passengers, freight or property destined to points upon the lines of any two or more other common carriers or in any respect with reference to passengers, freight or property transferred or received from any two or more other common carriers. This section shall not be construed to require a common carrier to permit or allow any other common carrier to use its tracks or terminal facilities. Every common carrier, as such, is required to receive from every other common

carrier, at a connecting point, freight cars of proper standard, and haul the same through to destination, if the destination be upon a line owned, operated or controlled by such common carrier, or if the destination be upon a line of some other common carrier, to haul any car so delivered through to the connecting point upon the line owned, operated, controlled or leased by it, by way of route over which such car is billed, and there to deliver the same to the next connecting carrier. Nothing in this section shall be construed as in anywise limiting or modifying the duty of a common carrier to establish joint rates, fares and charges for the transportation of passengers, freight and property over the lines owned, operated, controlled and leased by it and the lines of other common carriers, nor as in any manner limiting or modifying the power of the commission to require the establishment of such joint rates, fares and charges. A railroad corporation and a street railroad corporation shall not be required to interchange cars except on such terms and conditions as the commission may direct.

§ 36. **Long and short haul.**— No common carrier, subject to the provisions of this act, shall charge or receive any greater compensation in the aggregate for the transportation of passengers or of a like kind of property, under substantially similar circumstances and conditions, for a shorter than for a longer distance over the same line in the same direction, the shorter being included within the longer distance; but this shall not be construed as authorizing any such common carriers to charge and receive as great a compensation for a shorter as for a longer distance or haul. Upon application of a common carrier the commission may by order authorize it to charge less for longer than for shorter distances for the transportation of passengers or property in special cases after investigation by the commission, but the order must specify and prescribe the extent to which the common carrier making such application is relieved from the operation of this section, and only to the extent so specified and prescribed shall any common carrier be relieved from the operation and requirements of this section.

§ 37. **Distribution of cars.**— 1. Every railroad corporation or other common carrier engaged in the transportation of freight shall, upon reasonable notice, furnish to all persons and corporations who may apply therefor, and offer freight for transportation, sufficient and suitable cars for the transportation of such freight in car-load lots. Every railroad corporation and street railroad corporation shall have sufficient cars and motive power to meet all requirements for the transportation of passengers and property which may reasonably be anticipated, unless relieved therefrom by order of the commission. In case, at any particular time, a common carrier has not sufficient cars to meet all requirements for the transportation of property in car-load lots, all cars available to it for such purposes shall be distributed among the several applicants therefor, without discrimination between shippers, localities or competitive or non-competitive points, but preference may always be given in the supply of cars for shipment of livestock or perishable property.

2. The commission shall have power to make, and by order shall make, reasonable regulations for the furnishing and distribution of freight cars to shippers, for the switching of the same, for the loading and unloading

thereof, for demurrage charges in respect thereto, and for the weighing of cars and freight offered for shipment or transported by any common carrier.

§ 38. **Liability for damage to property in transit.**— Every common carrier and every railroad corporation and street railroad corporation shall, upon demand, issue either a receipt or bill of lading for all property delivered to it for transportation. No contract, stipulation or clause in any receipt or bill of lading shall exempt or be held to exempt any common carrier, railroad corporation or street railroad corporation from any liability for loss, damage or injury caused by it to freight or property from the time of its delivery for transportation until the same shall have been received at its destination and a reasonable time shall have elapsed after notice to consignee of such arrival to permit of the removal of such freight or property. Every common carrier, railroad corporation and street railroad corporation shall be liable for all loss, damage or injury to property caused by delay in transit due to negligence while the same is being carried by it, but in any action to recover for damages sustained by delay in transit the burden of proof shall be upon the defendant to show that such delay was not due to negligence. Every common carrier and railroad corporation shall be liable for loss, damage and injury to property carried as baggage up to the full value and regardless of the character thereof, but the value in excess of one hundred and fifty dollars shall be stated upon delivery to the carrier, and a written receipt stating the value shall be issued by the carrier, who may make a reasonable charge for the assumption of such liability in excess of one hundred and fifty dollars and for the carriage of baggage exceeding one hundred and fifty pounds in weight upon a single ticket. Nothing in this section shall deprive any holder of such receipt or bill of lading of any remedy or right of action which he has under existing law.

§ 39. **Continuous carriage.**— No common carrier shall enter into or become a party to any combination, contract, agreement or understanding, written or oral, express or implied, to prevent by any arrangement or by change of arrangement of time schedule, by carriage in different cars or by any other means or device whatsoever the carriage of freight and property from being continuous from the place of shipment to the place of destination. No breakage of bulk, stoppage or interruption of carriage made by any common carrier shall prevent the carriage of freight and property from being treated as one continuous carriage from the place of shipment to the place of destination. Nor shall any such breakage of bulk, stoppage or interruption of carriage be made or permitted by any common carrier except it be done in good faith for a necessary purpose without intention to avoid or unnecessarily interrupt or delay the continuous carriage of such freight or property or to evade any of the provisions of law, of this act or of an order of the commission.

§ 40. **Liability for loss or damage caused by violation of this act.**— In case a common carrier shall do, cause to be done or permit to be done any act, matter or thing prohibited, forbidden or declared to be unlawful, or shall omit to do any act, matter or thing required to be done, either by any law of the state of New York, by this act or by an order of the commission, such common carrier shall be liable to the persons or corporations affected thereby for all loss, damage or injury caused thereby or resulting therefrom,

and in case of recovery, if the court shall find that such act or omission was wilful, it may in its discretion fix a reasonable counsel or attorney's fee, which fee shall be taxed and collected as part of the costs in the case. An action to recover for such loss, damage or injury may be brought in any court of competent jurisdiction by any such person or corporation.

ARTICLE III.

PROVISIONS RELATING TO THE POWERS OF THE COMMISSIONS IN RESPECT TO COMMON CARRIERS, RAILROADS AND STREET RAILROADS.

Section 45. General powers and duties of commissions in respect to common carriers, railroads and street railroads.
46. Reports of common carriers, railroad corporations and street railroad corporations.
47. Investigation of accidents.
48. Investigations by commission.
49. Rates and service to be fixed by the commissions.
50. Power of commissions to order repairs or changes.
51. Power of commissions to order changes in time schedules; running of additional cars and trains.
52. Uniform system of accounts, access to accounts, et cetera; forfeitures.
53. Franchises and privileges.
54. Transfer of franchises or stocks.
55. Approval of issues of stock, bonds and other forms of indebtedness.
56. Forfeiture; penalties.
57. Summary proceedings.
58. Penalties for other than common carriers.
59. Action to recover penalties or forfeitures.
60. Duties of commissions as to interstate traffic.

§ 45. General powers and duties of commissions in respect to common carriers, railroads and street railroads.— 1. Each commission and each commissioner shall have power and authority to administer oaths, in all parts of the state, to witnesses summoned to testify in any inquiry, investigation, hearing or proceeding; and also to administer oaths in all parts of the state whenever the exercise of such power is incidentally necessary or proper to enable the commission or a commissioner to perform a duty or to exercise a power.

2. Each commission shall have the general supervision of all common carriers, railroads, street railroads, railroad corporations and street railroad corporations within its jurisdiction as hereinbefore defined, and shall have power to and shall examine the same and keep informed as to their general condition, their capitalization, their franchises and the manner in which their lines, owned, leased, controlled or operated, are managed, conducted and operated, not only with respect to the adequacy, security and accommodation afforded by their service, but also with respect to their compliance with all provisions of law, orders of the commission and charter requirements.

3. Each commission and each commissioner shall have power to examine all books, contracts, records, documents and papers of any person or corporation subject to its supervision, and by subpoena duces tecum to compel production thereof. In lieu of requiring production of originals by subpoena duces tecum, the commission or any commissioner may require sworn copies of any such books, records, contracts, documents and papers or parts thereof to be filed with it.

4. Either commission shall conduct a hearing and take testimony as to the advisability of any proposed change of law relating to any common carrier, railroad corporation or street railroad corporation, if requested to do so by the legislature, by the senate or assembly committee on railroads, or by the governor, and may conduct such a hearing, when requested to do so by any person or corporation, and shall report its conclusions to the officer, body, person or corporation at whose request the hearing was held. The commission may also recommend the enactment of such legislation, with respect to any matter within its jurisdiction, as it deems wise or necessary in the public interest, and may draft or cause to be drafted such bills or acts as it may deem necessary or proper to enact into law the legislation recommended by it.

§ 46. **Reports of common carriers, railroad corporations and street railroad corporations.**— Each commission shall prescribe the form of the annual reports required under this act to be made by common carriers, railroad and street railroad corporations, and may from time to time make such changes therein and additions thereto as it may deem proper; provided, however, that if any such changes or additions require any alteration in the method or form of keeping the accounts of such corporations, the commission shall give to them at least six months' notice before the expiration of any fiscal year of any such changes or additions, and on or before June thirtieth, in each year, shall furnish a blank form for such report. The contents of such report and the form thereof shall conform as near as may be to that required of common carriers under the provisions of the act of congress, entitled "An act to regulate commerce," approved February fourth, eighteen hundred and eighty-seven, and the act amendatory thereof approved June twenty-ninth, nineteen hundred and six, and other amendments thereto. The commission may require such report to contain information in relation to rates or regulations concerning fares or freights, agreements or contracts affecting the same, so far as such rates or regulations pertain to transportation within the state. When the report of any such corporation is defective, or believed to be erroneous, the commission shall notify the corporation to amend the same within thirty days. The originals of the reports, subscribed and sworn to as prescribed by law, shall be preserved in the office of the commission. The commission may also require such corporations to file monthly reports of earnings and expenses within a specified time. The commission may require of all such corporations specific answers to questions upon which the commission may need information. The annual report required to be filed by a common carrier, railroad or street railroad corporation shall be so filed on or before the thirtieth day of September in each year. The commission may extend the time for making and filing such report for a period not exceeding sixty days. If such corporation shall fail to make and file the annual report within the time above specified or within

the time as extended by the commission, or shall fail to make specific answer to any question, or shall fail to make the monthly reports when required by the commission as herein provided, within thirty days from the time when it is required to make and file any such report or answer, such corporation shall forfeit to the state the sum of one hundred dollars for each and every day it shall continue to be in default with respect to such report or answer. Such forfeiture shall be recovered in an action brought by the commission in the name of the people of the state of New York. The amount recovered in any such action shall be paid into the state treasury and credited to the general fund. Any railroad corporation operating a line partly within the second district and partly within the first district shall report to the commission of the second district; but the commission of the first district may, upon reasonable notice, require a special report from such railroad corporation. Any street railroad corporation operating a line partly within the first district and partly within the second district shall report to the commission of the first district; but the commission of the second district may, upon reasonable notice, require a special report from such street railroad corporation.

§ 47. **Investigation of accidents.**— Each commission shall investigate the cause of all accidents on any railroad or street railroad within its district which result in loss of life or injury to persons or property, and which in its judgment shall require investigation. Every common carrier, railroad corporation and street railroad corporation is hereby required to give immediate notice to the commission of every accident happening upon any line of railroad or street railroad owned, operated, controlled or leased by it, within the territory over which such commission has jurisdiction in such manner as the commission may direct. Such notice shall not be admitted as evidence or used for any purpose against such common carrier, railroad corporation or street railroad corporation giving such notice in any suit or action for damages growing out of any matter mentioned in said notice.

§ 48. **Investigations by commission.**— 1. Each commission may, of its own motion, investigate or make inquiry, in a manner to be determined by it, as to any act or thing done or omitted to be done by any common carrier, railroad corporation or street railroad corporation, subject to its supervision, and the commission must make such inquiry in regard to any act or thing done or omitted to be done by any such common carrier, railroad corporation or street railroad corporation in violation of any provision of law or in violation of any order of the commission.

2. Complaints may be made to the proper commission by any person or corporation aggrieved, by petition or complaint in writing setting forth any thing or act done or omitted to be done by any common carrier, railroad corporation or street railroad corporation in violation, or claimed to be in violation, of any provision of law or of the terms and conditions of its franchise or charter or of any order of the commission. Upon the presentation of such a complaint the commission shall cause a copy thereof to be forwarded to the person or corporation complained of, accompanied by an order, directed to such person or corporation, requiring that the matters complained of be satisfied, or that the charges be answered in writing within a time to be specified by the commission. If the person or corporation complained of shall make reparation for any injury alleged and shall cease to

commit, or to permit, the violation of law, franchise or order charged in the complaint, and shall notify the commission of that fact before the time allowed for answer, the commission need take no further action upon the charges. If, however, the charges contained in such petition be not thus satisfied, and it shall appear to the commission that there are reasonable grounds therefor, it shall investigate such charges in such manner and by such means as it shall deem proper, and take such action within its powers as the facts justify.

3. Whenever either commission shall investigate any matter complained of by any person or corporation aggrieved by any act or omission of a common carrier, railroad corporation or street railroad corporation under this section it shall be its duty to make and file an order either dismissing the petition or complaint or directing the common carrier, railroad corporation or street railroad corporation complained of to satisfy the cause of complaint in whole or to the extent which the commission may specify and require.

§ 49. Rates and service to be fixed by the commission.— Whenever either commission shall be of opinion, after a hearing, upon a complaint made as provided in this act, that the rates, fares or charges demanded, exacted, charged or collected by any common carrier, railroad corporation or street railroad corporation subject to its jurisdiction for the transportation of persons, freight or property within the state, or that the regulations or practices of such common carrier, railroad corporation or street railroad corporation affecting such rates are unjust, unreasonable, unjustly discriminatory or unduly preferential, or in anywise in violation of any provision of law, the commission shall determine the just and reasonable rates, fares and charges to be thereafter observed and in force as the maximum to be charged for the service to be performed, and shall fix the same by order to be served upon all common carriers, railroad corporations or street railroad corporations by whom such rates, fares and charges are thereafter to be observed. And whenever the commission shall be of opinion, after a hearing, had upon its own motion or upon complaint, that the regulations, practices, equipment, appliances, or service of any such common carrier, railroad corporation or street railroad corporation in respect to transportation of persons, freight or property within the state are unjust, unreasonable, unsafe, improper or inadequate, the commission shall determine the just, reasonable, safe, adequate and proper regulations, practices, equipment, appliances and service thereafter to be in force, to be observed and to be used in such transportation of persons, freight and property and so fix and prescribe the same by order to be served upon every common carrier, railroad corporation and street railroad corporation to be bound thereby; and thereafter it shall be the duty of every common carrier, railroad corporation and street railroad corporation to observe and obey each and every requirement of every such order so served upon it, and to do everything necessary or proper in order to secure absolute compliance with and observance of every such order by all its officers, agents and employees. The commission shall have power by order to require any two or more common carriers or railroad corporations whose lines, owned, operated, controlled or leased, form a continuous line of transportation or could be made to do so by the construction and maintenance of switch connection, to establish through routes

and joint rates, fares and charges for the transportation of passengers, freight and property within the state as the commission may, by its order, designate; and in case such through routes and joint rates be not established by the common carriers or railroad corporations named in any such order within the time therein specified, the commission shall establish just and reasonable rates, fares and charges to be charged for such through transportation, and declare the portion thereof to which each common carrier or railroad corporation affected thereby shall be entitled and the manner in which the same shall be paid and secured.

§ 50. **Power of commissions to order repairs or changes.**— If, in the judgment of the commission having jurisdiction, repairs or improvements to or changes in any tracks, switches, terminals or terminal facilities, motive power, or any other property or device used by any common carrier, railroad corporation or street railroad corporation in or in connection with the transportation of passengers, freight or property ought reasonably to be made, or that any additions should reasonably be made thereto, in order to promote the security or convenience of the public or employees, or in order to secure adequate service or facilities for the transportation of passengers, freight or property, the commission shall, after a hearing either on its own motion or after complaint, make and serve an order directing such repairs, improvements, changes or additions to be made within a reasonable time and in a manner to be specified therein, and every common carrier, railroad corporation and street railroad corporation is hereby required and directed to make all repairs, improvements, changes and additions required of it by any order of the commission served upon it.

§ 51. **Power of commissions to order changes in time schedules; running of additional cars and trains.**— If, in the judgment of the commission having jurisdiction, any railroad corporation or street railroad corporation does not run trains enough or cars enough or possess or operate motive power enough, reasonably to accommodate the traffic, passenger and freight, transported by or offered for transportation to it, or does not run its trains or cars with sufficient frequency or at a reasonable or proper time having regard to safety, or does not run any train or trains, car or cars, upon a reasonable time schedule for the run, the commission shall, after a hearing either on its own motion or after complaint, have power to make an order directing any such railroad corporation or street railroad corporation to increase the number of its trains or of its cars or its motive power or to change the time for starting its trains or cars or to change the time schedule for the run of any train or car or make any other suitable order that the commission may determine reasonably necessary to accommodate and transport the traffic, passenger or freight, transported or offered for transportation.

§ 52. **Uniform system of accounts; access to accounts, etc.; forfeitures.**— Each commission may, whenever it deems advisable, establish a uniform system of accounts to be used by railroad and street railroad corporations or other common carriers which are subject to its supervision, and may prescribe the manner in which such accounts shall be kept. It may also in its discretion prescribe the forms of accounts, records and memoranda to be kept by such corporations, including the accounts, records and memoranda of the movement of traffic as well as the receipts and expenditures of moneys. The system of accounts established by the commission and the forms of ac-

counts, records and memoranda prescribed by it as provided above shall conform as near as may be to those from time to time established and prescribed by the interstate commerce commission under the provisions of the act of congress entitled "An act to regulate commerce" approved February fourth, eighteen hundred and eighty-seven, as amended by the act approved June twenty-ninth, nineteen hundred and six, and amendments thereto. The commission shall at all times have access to all accounts, records and memoranda kept by railroad and street railroad corporations and may prescribe the accounts in which particular outlays and receipts shall be entered, and may designate any of its officers or employees who shall thereupon have authority under the order of the commission to inspect and examine any and all accounts, records and memoranda kept by such corporations. Where the commission has prescribed the forms of accounts, records and memoranda to be kept by such corporations it shall be unlawful for them to keep any other accounts, records or memoranda than those so prescribed, or those prescribed by or under authority of the United States. Any employee or agent of the commission who divulges any fact or information which may come to his knowledge during the course of any such inspection or examination except in so far as he may be directed by the commission, or by a court or judge thereof, or authorized by law, shall be guilty of a misdemeanor.

§ 53. **Franchises and privileges.**— Without first having obtained the permission and approval of the proper commission no railroad corporation, street railroad corporation or common carrier shall begin the construction of a railroad or street railroad, or any extension thereof, for which prior to the time when this act becomes a law a certificate of public convenience and necessity shall not have been granted by the board of railroad commissioners or where prior to said time said corporation or common carrier shall not have become entitled by virtue of its compliance with the provisions of the railroad law to begin such construction; nor, except as above provided in this section, shall any such corporation or common carrier exercise any franchise or right under any provision of the railroad law, or of any other law, not heretofore lawfully exercised, without first having obtained the permission and approval of the proper commission. The commission within whose district such construction is to be made, or within whose district such franchise or right is to be exercised, shall have power to grant the permission and approval herein specified whenever it shall after due hearing determine that such construction or such exercise of the franchise or privilege is necessary or convenient for the public service. And if such construction is to be made, or such franchise to be exercised in both districts, the approval of both commissions shall be secured.

§ 54. **Transfer of franchises or stocks.**—No franchise nor any right to or under any franchise, to own or operate a railroad or street railroad shall be assigned, transferred or leased, nor shall any contract or agreement with reference to or affecting any such franchise or right be valid or of any force or effect whatsoever, unless the assignment, transfer, lease, contract or agreement shall have been approved by the proper commission. The permission and approval of the commission, to the exercise of a franchise under section fifty-three, or to the assignment, transfer or lease of a franchise under this section shall not be construed to revive or validate any lapsed or invalid franchise, or to enlarge or add to the powers and privileges contained in the grant of any franchise, or to waive any forfeiture.

No railroad corporation, or street railroad corporation, domestic or foreign, shall hereafter purchase or acquire, take or hold, any part of the capital stock of any railroad corporation or street railroad corporation or other common carrier organized or existing under or by virtue of the laws of this state, unless authorized so to do by the commission empowered by this act to give such consent; and save where stock shall be transferred or held for the purpose of collateral security only with the consent of the commission empowered by this act to give such consent, no stock corporation of any description, domestic or foreign, other than a railroad corporation or street railroad corporation, shall purchase or acquire, take or hold, more than ten per centum of the total capital stock issued by any railroad corporation or street railroad corporation or other common carrier organized or existing under or by virtue of the laws of this state. Nothing herein contained shall be construed to prevent the holding of stock heretofore lawfully acquired. Every contract, assignment, transfer or agreement for transfer of any stock by or through any person or corporation to any corporation, in violation of any provision of this act, shall be void and of no effect, and no such transfer or assignment shall be made upon the books of any such railroad corporation or street railroad corporation, or shall be recognized as effective for any purpose. The power conferred by this section to approve or disapprove a transaction relating to franchises, rights or stock of any railroad corporation or street railroad corporation, or other common carrier, shall be exercised by the commission which is authorized by this act to approve the issue of stock by such railroad corporation or street railroad corporation.

§ 55. **Approval of issues of stock, bonds and other forms of indebtedness.** —A common carrier, railroad corporation or street railroad corporation organized or existing, or hereafter incorporated, under or by virtue of the laws of the state of New York, may issue stocks, bonds, notes or other evidence of indebtedness payable at periods of more than twelve months after the date thereof, when necessary for the acquisition of property, the construction, completion, extension or improvement of its facilities, or for the improvement or maintenance of its service or for the discharge or lawful refunding of its obligations, provided and not otherwise that there shall have been secured from the proper commission an order authorizing such issue, and the amount thereof and stating that, in the opinion of the commission, the use of the capital to be secured by the issue of such stock, bonds, notes or other evidence of indebtedness is reasonably required for the said purposes of the corporation, but this provision shall not apply to any lawful issue of stock, to the lawful execution and delivery of any mortgage or to the lawful issue of bonds thereunder, which shall have been duly approved by the board of railroad commissioners before the time when this act becomes a law. For the purpose of enabling it to determine whether it should issue such an order, the commission shall make such inquiry or investigation, hold such hearings and examine such witnesses, books, papers, documents or contracts as it may deem of importance in enabling it to reach a determination. Such common carrier, railroad corporation or street railroad corporation may issue notes, for proper corporate purposes and not in violation of any provision of this or any other act, payable at periods of not more than twelve months without such consent, but no such notes shall, in whole or in part,

directly or indirectly be refunded by any issue of stock or bonds or by any evidence of indebtedness running for more than twelve months without the consent of the proper commission. Provided, however, that the commission shall have no power to authorize the capitalization of any franchise to be a corporation or to authorize the capitalization of any franchise or the right to own, operate or enjoy any franchise whatsoever in excess of the amount (exclusive of any tax or annual charge) actually paid to the state or to a political subdivision thereof as the consideration for the grant of such franchise or right; nor shall the capital stock of a corporation formed by the merger or consolidation of two or more other corporations, exceed the sum of the capital stock of the corporations so consolidated, at the par value thereof, or such sum and any additional sum actually paid in cash; nor shall any contract for consolidation or lease be capitalized in the stock of any corporation whatever; nor shall any corporation hereafter issue any bonds against or as a lien upon any contract for consolidation or merger. Whenever it shall happen that any railroad corporation shall own or operate its lines in both districts it shall, under this section, apply to the commission of the second district. Whenever it shall happen that any street railroad corporation shall own or operate its lines in both districts, it shall, under this section, apply to the commission of the first district. Any other common carrier not operating exclusively in the first district shall apply to the commission of the second district.

§ 56. **Forfeiture; penalties.**— 1. Every common carrier, railroad corporation and street railroad corporation and all officers, and agents of any common carrier, railroad corporation or street railroad corporation shall obey, observe and comply with every order made by the commission, under authority of this act, so long as the same shall be and remain in force. Any common carrier, railroad corporation or street railroad corporation which shall violate any provision of this act, or which fails, omits or neglects to obey, observe or comply with any order or any direction or requirement of the commission, shall forfeit to the people of the state of New York not to exceed the sum of five thousand dollars for each and every offense; every violation of any such order or direction or requirement, or of this act, shall be a separate and distinct offense, and, in case of a continuing violation, every day's continuance thereof shall be and be deemed to be a separate and distinct offense.

2. Every officer and agent of any such common carrier or corporation who shall violate, or who procures, aids or abets any violation by any such common carrier or corporation of, any provision of this act, or who shall fail to obey, observe and comply with any order of the commission, or any provision of an order of the commission, or who procures, aids or abets any such common carrier or corporation in its failure to obey, observe and comply with any such order or provision, shall be guilty of a misdemeanor.

§ 57. **Summary proceedings.**— Whenever either commission shall be of opinion that a common carrier, railroad corporation or street railroad corporation subject to its supervision is failing or omitting or about to fail or omit to do anything required of it by law or by order of the commission, or is doing anything or about to do anything or permitting anything or about to permit anything to be done, contrary to or in violation of law or of any order of the commission, it shall direct counsel to the commission to com-

mence an action or proceeding in the supreme court of the state of New York in the name of the commission for the purpose of having such violations or threatened violations stopped and prevented either by mandamus or injunction. Counsel to the commission shall thereupon begin such action or proceeding by a petition to the supreme court alleging the violation complained of and praying for appropriate relief by way of mandamus or injunction. It shall thereupon be the duty of the court to specify the time, not exceeding twenty days after service of a copy of the petition, within which the common carrier, railroad corporation or street railroad corporation complained of must answer the petition. In case of default in answer or after answer, the court shall immediately inquire into the facts and circumstances in such manner as the court shall direct without other or formal pleadings, and without respect to any technical requirement. Such other persons or corporations as the court shall deem necessary or proper to join as parties in order to make its order, judgment or writs effective, may be joined as parties upon application of counsel to the commission. The final judgment in any such action or proceeding shall either dismiss the action or proceeding or direct that a writ of mandamus or an injunction or both issue as prayed for in the petition or in such modified or other form as the court may determine will afford appropriate relief.

§ 58. Penalties for other than common carriers.— 1. Any corporation, other than a common carrier, railroad corporation or street railroad corporation, which shall violate any provision of this act, or shall fail to obey, observe and comply with every order made by the commission under authority of this act, so long as the same shall be and remain in force, shall forfeit to the people of the state of New York a sum not exceeding one thousand dollars for each and every offense; every such violation shall be a separate and distinct offense, and the penalty or forfeiture thereof shall be recovered in an action as provided in section fifty-nine of this act.

2. Every person who, either individually or acting as an officer or agent of a corporation other than a common carrier, railroad corporation or street railroad corporation, shall violate any provision of this act or fail to obey, observe or comply with any order made by the commission under this act, so long as the same shall be or remain in force, or who shall procure, aid or abet any such corporation in its violation of this act or in its failure to obey, observe or comply with any such order, shall be guilty of a misdemeanor.

3. In construing and enforcing the provisions of this act relating to forfeitures and penalties the act of any director, officer or other person acting for or employed by any common carrier, railroad corporation, street railroad corporation or corporation, acting within the scope of his official duties or employment, shall be in every case and be deemed to be the act of such common carrier, railroad corporation, street railroad corporation or corporation.

§ 59. Action to recover penalties or forfeitures.— An action to recover a penalty or a forfeiture under this act may be brought in any court of competent jurisdiction in this state in the name of the people of the state of New York, and shall be commenced and prosecuted to final judgment by counsel to the commission. In any such action all penalties and forfeitures incurred up to the time of commencing the same may be sued for and recovered therein, and the commencement of an action to recover a penalty

or forfeiture shall not be, or be held to be, a waiver of the right to recover any other penalty or forfeiture; if the defendant in such action shall prove that during any portion of the time for which it is sought to recover penalties or forfeitures for a violation of an order of the commission the defendant was actually and in good faith prosecuting a suit, action or proceeding in the courts to set aside such order, the court shall remit the penalties or forfeitures incurred during the pendency of such suit, action or proceeding. All moneys recovered in any such action, together with the costs thereof, shall be paid into the state treasury to the credit of the general fund.

§ 60. **Duties of commissions as to interstate traffic.**— Either commission may investigate freight rates on interstate traffic on railroads within the state, and when such rates are, in the opinion of either commission, excessive or discriminatory or are levied or laid in violation of the interstate commerce law, or in conflict with the rulings, orders or regulations of the interstate commerce commission, the commission may apply by petition to the interstate commerce commission for relief or may present to the interstate commerce commission all facts coming to its knowledge, as to violations of the rulings, orders, or regulations of that commission or as to violations of the interstate commerce law.

ARTICLE IV.

PROVISIONS RELATING TO GAS AND ELECTRICAL CORPORATIONS; REGULATION OF PRICE OF GAS AND ELECTRICITY.

Section 65. Application of article.
66. General powers of commissions in respect to gas and electricity.
67. Inspection of gas and electric meters.
68. Approval of incorporation and franchises; certificate.
69. Approval of issue of stock, bonds and other forms of indebtedness.
70. Approval of transfer of franchise.
71. Complaints as to quality and price of gas and electricity; investigation by commission; forms of complaints.
72. Notice and hearing; order fixing price of gas or electricity, or requiring improvements.
73. Forfeiture for noncompliance with order.
74. Summary proceedings.
75. Defense in case of excessive charge for gas or electricity.
76. Jurisdiction.
77. Powers of local officers.

§ 65. **Application of article.**— This article shall apply to the manufacture and furnishing of gas for light, heat or power and the furnishing of natural gas for light, heat or power, and the generation, furnishing and transmission of electricity for light, heat or power.

§ 66. **General powers of commissions in respect to gas and electricity.**— Each commission shall within its jurisdiction:

1. Have the general supervision of all persons and corporations having authority under any general or special law or under any charter or fran-

chise to lay down, erect or maintain wires, pipes, conduits, ducts or other fixtures in, over or under the streets, highways and public places of any municipality, for the purpose of furnishing or distributing gas or of furnishing or transmitting electricity for light, heat or power, or maintaining underground conduits or ducts for electrical conductors.

2. Investigate and ascertain, from time to time, the quality of gas supplied by persons, corporations and municipalities; examine the methods employed by such persons, corporations and municipalities in manufacturing and supplying gas or electricity for light, heat or power and in transmitting the same, and have power to order such improvements as will best promote the public interest, preserve the public health and protect those using such gas or electricity and those employed in the manufacture and distribution thereof, or in the maintenance and operation of the works, wires, poles, lines, conduits, ducts and systems maintained in connection therewith.

3. Have power to fix the standard of illuminating power and purity of gas, not less than that prescribed by law, to be manufactured or sold by persons, corporations or municipalities for lighting, heating or power purposes, and to prescribe methods of regulation of the electric supply system as to the use for incandescent lighting and fix the initial efficiency of incandescent lamps furnished by the persons, corporations or municipalities generating and selling electric current for lighting, and by order to require the gas so manufactured or sold to equal the standard so fixed by it, and to establish the regulations as to pressure at which gas shall be delivered. For the purpose of determining whether the gas sold by such persons, corporations or municipalities for lighting, heating or power purposes conforms to the standard of illuminating power and purity and, of its own motion, examine and investigate the methods employed in manufacturing delivering and supplying the gas so sold, and shall have access through its members or persons employed and authorized by it to make such examinations and investigations to all parts of the manufacturing plants owned, used or operated for the manufacture or distribution of gas by any such person, corporation or municipality. Any employee or agent of the commission who divulges any fact or information which may come to his knowledge during the course of any such inspection or examination, except in so far as he may be directed by the commission, or by a court or judge thereof, or authorized by law, shall be guilty of a misdemeanor.

4. Have power, in its discretion, to prescribe uniform methods of keeping accounts, records and books, to be observed by the persons, corporations and municipalities engaged in the manufacture, sale and distribution of gas and electricity for light, heat or power.

5. Examine all persons, corporations and municipalities under its supervision, keep informed as to the methods employed by them in the transaction of their business and see that their property is maintained and operated for the security and accommodation of the public and in compliance with the provisions of law and of their franchises and charters.

6. Require every person and corporation under its supervision to submit to it an annual report, verified by the oath of the president, treasurer, or general manager thereof, showing in detail (1) the amount of its authorized capital stock and the amount thereof issued and outstanding; (2) the amount of its authorized bonded indebtedness and the amount of its

bonds and other forms of evidence of indebtedness issued and outstanding; (3) its receipts and expenditures during the preceding year; (4) the amount paid as dividends upon its stock and as interest upon its bonds; (5) the name of, and the amount paid as salary to each officer and the amount paid as wages to its employees; (6) the location of its plant or plants and system, with a full description of its property and franchises, stating in detail how each franchise stated to be owned was acquired, and (7) such other facts pertaining to the operation and maintenance of the plant and system, and the affairs of such person or corporation as may be required by the commission. Such reports shall be in the form, cover the period and be submitted at the time prescribed by the commission. The commission may, from time to time, make changes and additions in such forms, giving to the persons, corporations and municipalities six months' notice before the time fixed by the commission as the expiration of the fiscal year of any changes or additions which would require any alteration in the method or form of keeping their accounts for the ensuing year. When any such report is defective or believed to be erroneous, the commission shall notify the person, corporation or municipality making such report to amend the same within thirty days. Any such person or corporation or municipality which shall neglect to make any such report within the time specified by the commission, or which shall fail to correct any such report within thirty days after notice, shall be liable to a penalty of one hundred dollars and an additional penalty of one hundred dollars for each day after the prescribed time for which it shall neglect to file or correct the same, to be sued for in the name of the people of the state of New York. The amount recovered in any such action shall be paid into the state treasury and be credited to the general fund. The commission may extend the time herein limited for cause shown.

7. Require each municipality engaged in operating any works or systems for the manufacture and supplying of gas or electricity to make an annual report to the commission, verified by the oath of the general manager or superintendent thereof, showing in detail, (1) the amount of its authorized bonded indebtedness and the amount of its bonds and other forms of evidence of indebtedness issued and outstanding for lighting purposes, (2) its receipts and expenditures during the preceding year, (3) the amount paid as interest upon its bonds and upon other forms of evidence of indebtedness, (4) the name of and the amount paid to each person receiving a yearly or monthly salary, and the amount paid as wages to employees, (5) the location of its plant and system with a full description of the property, and (6) such other facts pertaining to the operation and maintenance of the plant and system, as may be required by the commission. Such report shall be in the form, cover the period and be submitted at the time prescribed by the commission.

8. Have power, either through its members or inspectors or employees duly authorized by it, to enter in or upon and to inspect the property, buildings, plants, factories, power houses and offices of any of such corporations, persons or municipalities.

9. Have power to examine the books and affairs of any such corporation, persons or municipalities, and to compel the production before it of books and papers pertaining to the affairs being investigated by it.

10. Have power, either as a commission or through its members, to subpoena witnesses, take testimony and administer oaths to witnesses in any proceeding or examination instituted before it, or conducted by it in reference to any matter within its jurisdiction under this article.

§ 67. **Inspection of gas and electric meters.**— 1. Each commission shall appoint inspectors of gas and electric meters whose duty it shall be when required, to inspect, examine, prove and ascertain the accuracy of any and all gas meters used or intended to be used for measuring or ascertaining the quantity of illuminating or fuel gas or natural gas furnished by any gas corporation to or for the use of any person and any and all electric meters used or intended to be used for measuring and ascertaining the quantity of electric current furnished for light, heat and power by any electrical corporation to or for the use of any person or persons and when found to be or made to be correct, the inspector shall stamp or mark all such meters and each of them with some suitable device, which device shall be recorded in the office of the secretary of state.

2. No corporation or person shall furnish or put in use any gas meter which shall not have been inspected, proved and sealed, or any electric meter which shall not have been inspected, approved, stamped or marked by an inspector of the commission. Every gas and electrical corporation shall provide or keep in and upon its premises a suitable and proper apparatus, to be approved and stamped or marked by the commission, for testing and proving the accuracy of gas and electric meters furnished for use by it, and by which apparatus every meter may and shall be tested, on the written request of the consumer to whom the same shall be furnished, and in his presence if he desires it.

If any consumer to whom a meter has been furnished, shall request the commission in writing to inspect such meter, the commission shall have the same inspected and tested; if the same on being so tested shall be found to be, four per cent. if an electric meter, or two per cent. if a gas meter, defective or incorrect to the prejudice of the consumer, the inspector shall order the gas or electrical corporation forthwith to remove the same and to place instead thereof a correct meter, and the expense of such inspection and test shall be borne by the corporation; if the same on being so tested shall be found to be correct the expense of such inspection and test shall be borne by the consumer. A uniform reasonable charge shall be fixed by the commission for this service.

§ 68. **Approval of incorporation and franchises; certificate.**— No gas corporation or electrical corporation incorporated under the laws of this or any other state shall begin construction, or exercise any right or privilege under any franchise hereafter granted, or under any franchise heretofore granted but not heretofore actually exercised without first having obtained the permission and approval of the proper commission. Before such certificate shall be issued a certified copy of the charter of such corporation shall be filed in the office of the commission, together with a verified statement of the president and secretary of the corportation,* showing that it has received the required consent of the proper municipal authorities. No municipality shall build, maintain and operate for other than municipal

* So in original.

purposes any works or systems for the manufacture and supplying of gas or electricity for lighting purposes without a certificate of authority granted by the commission. If the certificate of authority is refused, no further proceedings shall be taken before the commission, but a new application may be made therefor after one year from the date of such refusal.

§ 69. **Approval of issues of stock, bonds and other forms of indebtedness.** —A gas corporation or electrical corporation organized or existing, or hereafter incorporated, under or by virtue of the laws of the state of New York, may issue stocks, bonds, notes or other evidence of indebtedness payable at periods of more than twelve months after the date thereof, when necessary for the acquisition of property, the construction, completion, extension or improvement of its plant or distributing system, or for the improvement or maintenance of its service or for the discharge or lawful refunding of its obligations, provided and not otherwise that there shall have been secured from the proper commission an order authorizing such issue, and the amount thereof, and stating that, in the opinion of the commission, the use of the capital to be secured by the issue of such stock, bonds, notes or other evidence of indebtedness is reasonably required for the said purposes of the corporation. For the purpose of enabling it to determine whether or not it should issue such an order, the commission shall make such inquiry or investigation, hold such hearings and examine such witnesses, books, papers, documents or contracts as it may deem of importance in enabling it to reach a determination. Such gas corporation or electrical corporation may issue notes, for proper corporate purposes and not in violation of any provision of this or of any other act, payable at periods of not more than twelve months without such consent; but no such notes shall, in whole or in part, directly or indirectly be refunded by any issue of stock or bonds or by any evidence of indebtedness running for more than twelve months without the consent of the proper commission. Provided, however, that the commission shall have no power to authorize the capitalization of any franchise to be a corporation or to authorize the capitalization of any franchise or the right to own, operate or enjoy any franchise whatsoever in excess of the amount (exclusive of any tax or annual charge) actually paid to the state or to any political subdivision thereof as the consideration for the grant of such franchise or right. Nor shall the capital stock of a corporation formed by the merger or consolidation of two or more other corporations, exceed the sum of the capital stock of the corporations, so consolidated, at the par value thereof, or such sum and any additional sum actually paid in cash; nor shall any contract for consolidation or lease be capitalized in the stock of any corporation whatever; nor shall any corporation hereafter issued any bonds against or as a lien upon any contract for consolidation or merger.

§ 70. **Approval of transfer of franchise.**— No gas corporation or electrical corporation shall transfer or lease its franchise, works or system or any part of such franchise, works or system to any other person or corporation or contract for the operation of its works and system, without the written consent of the proper commission. The permission and approval of the commission, to the exercise of a franchise under section sixty-eight of this act, or to the assignment, transfer or lease of a franchise under this section shall not be construed to revive or validate any lapsed or invalid franchise

or to enlarge or add to the powers and privileges contained in the grant of any franchise or to waive any forfeiture. No such corporation shall directly or indirectly acquire the stock or bonds of any other corporation incorporated for, or engaged in, the same or a similar business, or proposing to operate or operating under a franchise from the same or any other municipality, unless authorized so to do by the commission. Save where stock shall be transferred or held for the purpose of collateral security only with the consent of the commission empowered by this act to give such consent, no stock corporation of any description, domestic or foreign, other than a gas or electrical corporation, shall purchase or acquire, take or hold, more than ten per centum of the total capital stock issued by any gas corporation or electrical corporation organized or existing under or by virtue of the laws of this state. Nothing herein contained shall be construed to prevent the holding of stock heretofore lawfully acquired. Every contract, assignment, transfer or agreement for transfer of any stock by or through any person or corporation to any corporation, in violation of any provision of this act, shall be void and of no effect, and no such transfer or assignment shall be made upon the books of any such gas corporation, or electrical corporation, or shall be recognized as effective for any purpose.

§ 71. **Complaints as to quality and price of gas and electricity; investigation by commission; forms of complaints.**— Upon the complaint in writing of the mayor of a city, the trustees of a village or the town board of a town in which a person or corporation is authorized to manufacture, sell or supply gas or electricity for heat, light or power, or upon the complaint in writing of not less than one hundred customers or purchasers of such gas or electricity in cities of the first or second class, or of not less than fifty in cities of the third class, or of not less than twenty-five elsewhere, either as to the illuminating power, purity, pressure or price of gas or the initial efficiency of the electric incandescent lamp supply, or the regulation of the voltage of the supply system used for incandescent lighting, or price of electricity sold and delivered in such municipality, the proper commission shall investigate as to the cause for such complaint. When such complaint is made, the commission may, by its agents, examiners and inspectors, inspect the works, system, plant and methods used by such person or corporation in manufacturing, transmitting and supplying such gas or electricity, and may examine or cause to be examined the books and papers of such person or corporation pertaining to the manufacture, sale, transmitting and supplying of such gas or electricity. The form and contents of complaints made as provided in this section shall be prescribed by the commission. Such complaints shall be signed by the officers, or by the customers, purchasers or subscribers making them, who must add to their signatures their places of residence, by street and number, if any.

§ 72. **Notice and hearing; order fixing price of gas or electricity, or requiring improvement.**— Before proceeding under a complaint presented as provided in section seventy-one, the commission shall cause notice of such complaint, and the purpose thereof, to be served upon the person or corporation affected thereby. Such person or corporation shall have an opportunity to be heard in respect to the matters complained of at a time and place to be specified in such notice. If an investigation be instituted upon motion of the commission the person or corporation affected by the investigation

may be permitted to appear before the commission at a time and place specified in the notice and answer all charges which may be preferred by the commission. After a hearing and after such investigation as may have been made by the commission or its officers, agents, examiners or inspectors, the commission within lawful limits may, by order, fix the maximum price of gas or electricity to be charged by such corporation or person, or may order such improvement in the manufacture or supply of such gas, in the manufacture, transmission or supply of such electricity, or in the methods employed by such person or corporation, as will in its judgment improve the service. The price so fixed by the commission shall be the maximum price to be charged by such person or corporation for gas or electricity in such municipality until the commission shall upon complaint as provided in this section or upon an investigation conducted by it on its own motion, again fix the maximum price of such gas or electricity. In determining the price to be charged for gas or electricity the commission may consider all facts which in its judgment have any bearing upon a proper determination of the question although not set forth in the complaint and not within the allegations contained therein.

§ 73. **Forfeiture for noncompliance with order.**— Every gas corporation and electrical corporation and the officers, agents or employees thereof shall obey, observe and comply with every order made by the commission under authority of this act, so long as the same shall be and remain in force. Any such corporation, or any officer, agent or employee thereof, who knowingly fails or neglects to obey or comply with such order, or any provision of this act, shall forfeit to the state of New York not to exceed the sum of one thousand dollars for each offense. Every distinct violation of any such order or of this act, shall be a separate offense, and in case of a continuing violation each day shall be deemed a separate offense. An action to recover such forfeiture may be brought in any court of competent jurisdiction in this state in the name of the people of the state of New York, and shall be commenced and prosecuted to final judgment by counsel to the commission. In any such action all penalties and forfeitures incurred up to the time of commencing the same may be sued for and recovered therein, and the commencement of an action to recover a penalty or forfeiture shall not be, or be held to be, a waiver of the right to recover any other penalty or forfeiture; if the defendant in such action shall prove that during any portion of the time for which it is sought to recover penalties or forfeitures for a violation of an order of the commission the defendant was actually and in good faith prosecuting the suit, action or proceeding in the courts to set aside such order, the court shall remit the penalties or forfeitures incurred during the pendency of such suit, action or proceeding. All moneys recovered in any such action, together with the costs thereof, shall be paid into the state treasury to the credit of the general fund.

§ 74. **Summary proceedings.**— Whenever either commission shall be of opinion that a gas corporation, electrical corporation or municipality within its jurisdiction is failing or omitting or about to fail or omit to do any-

thing required of it by law or by order of the commission or is doing anything or about to do anything or permitting anything or about to permit anything to be done, contrary to or in violation of law or of any order of the commission, it shall direct counsel to the commission to commence an action or proceeding in the supreme court of the state of New York in the name of the commission for the purpose of having such violations or threatened violations stopped and prevented either by mandamus or injunction. Counsel to the commission shall thereupon begin such action or proceeding by a petition to the supreme court alleging the violation complained of and praying for appropriate relief by way of mandamus or injunction. It shall thereupon be the duty of the court to specify the time not exceeding twenty days after service of a copy of the petition within which the gas corporation, electrical corporation or municipality complained of must answer the petition. In case of default in answer or after answer, the court shall immediately inquire into the facts and circumstances in such manner as the court shall direct without other or formal pleadings, and without respect to any technical requirement. Such other persons or corporations, as it shall seem to the court necessary or proper to join as parties in order to make its order, judgment or writs effective, may be joined as parties upon application of counsel to the commission. The final judgment in any such action or proceeding shall either dismiss the action or proceeding or direct that a writ of mandamus or an injunction or both issue as prayed for in the petition or in such modified or other form as the court may determine will afford appropriate relief.

§ 75. **Defense in case of excessive charges for gas or electricity.**— If it be alleged and established in an action brought in any court for the collection of any charge for gas or electricity, that a price has been demanded in excess of that fixed by the commission or by statute in the municipality wherein the action arose, no recovery shall be had therein, but the fact that such excessive charges have been made shall be a complete defense to such action.

§ 76. **Jurisdiction.**— Whenever any corporation supplies gas or electricity to consumers in both districts, any application or report to a commission required by this act shall be made to the commission of the district within which it is mainly supplying, or proposing to supply, such service to consumers. But nothing herein contained shall be construed to deprive the commission of either district of the power of supervision and regulation within its district. And either commission shall have power to enter and inspect the plant of such corporation, wherever situated.

§ 77. **Powers of local officers.**— If in any city of the first or second class there now exists or shall hereafter be created a board, body or officer having jurisdiction of matters pertaining to gas or electric service, such board, body or officer shall have and may exercise such power, jurisdiction and authority in enforcing the laws of the state and the orders, rules and regulations of the commission as may be prescribed by statute or by the commission.

ARTICLE V.

COMMISSIONS AND OFFICES ABOLISHED; SAVING CLAUSE; REPEAL.

Section 80. Board of railroad commissioners abolished; effect thereof.
81. Commission of gas and electricity abolished; effect thereof.
82. Inspector of gas meters abolished; effect thereof.
83. Board of rapid transit railroad commissioners abolished; effect thereof.
84. Transfer of records.
85. Pending actions and proceedings.
86. Construction.
87. Repeal.
88. Appropriation.
89. Time of taking effect.

§ 80. **Board of railroad commissioners abolished; effect thereof.**— On and after the taking effect of this act the board of railroad commissioners shall be abolished. All the powers and duties of such board conferred and imposed by any statute of this state shall thereupon be exercised and performed by the public service commissions.

§ 81. **Commission of gas and electricity abolished; effect thereof.**— On and after the taking effect of this act the commission of gas and electricity shall be abolished. All the powers and duties of such commission conferred and imposed by any statute of this state shall be exercised and performed by the public service commissions.

§ 82. **Inspector of gas meters abolished; effect thereof.**— On and after the taking effect of this act the offices of inspector and deputy inspectors of gas meters shall be abolished. All the powers and duties of such inspector conferred and imposed by any statute of this state shall be exercised and performed by the public service commissions. But any meter inspected, proved and sealed, by the said inspector of gas meters, prior to the taking effect of this act, shall be deemed to have been inspected by the commission.

§ 83. **Board of rapid transit railroad commissioners abolished; effect thereof.**— On and after the taking effect of this act the board of rapid transit railroad commissioners shall be abolished. All the powers and duties of such board conferred and imposed by any statute of this state shall thereupon be exercised and performed by the public service commission of the first district.

§ 84. **Transfer of records.**— 1. The board of railroad commissioners, the commission of gas and electricity, and the inspector of gas meters, shall transfer and deliver to the public service commission of the second district all books, maps, papers and records of whatever description, now in their possession; and upon taking effect of this act, the said commission is authorized to take possession of all such books, maps, papers and records.

2. The board of rapid transit railroad commissioners shall transfer and deliver to the public service commission of the first district all contracts, books, maps, plans, papers and records of whatever description, now in their possession; and upon taking effect of this act, the said commission is authorized to take possession of all such contracts, books, maps, plans, papers

and records. The said commission may also, at its pleasure, retain in its employment any person or persons now employed by the said board of rapid transit railroad commissioners, and all said persons shall be eligible for transfer and appointment to positions under the public service commission of the first district.

§ 85. **Pending actions and proceedings.**— This act shall not affect pending actions or proceedings, civil or criminal, brought by or against the board of railroad commissioners or the commission of gas and electricity, or the board of rapid transit railroad commissioners, but the same may be prosecuted or defended in the name of the public service commission, provided the subject-matter thereof is within the statutory jurisdiction of such commission. Any investigation, examination or proceeding undertaken, commenced or instituted by the said boards or commission or either of them prior to the taking effect of this act may be conducted and continued to a final determination by the proper public service commission in the same manner under the same terms and conditions, and with the same effect as though such boards or commission had not been abolished.

§ 86. **Construction.**— Wherever the terms board of railroad commissioners, or commission of gas and electricity or inspector of gas meters or board of rapid transit railroad commissioners occur in any law, contract or document or whenever in any law, contract or document reference is made to such boards, commission or inspector, such terms or reference shall be deemed to refer to and include the public service commissions as established by this act, so far as such law, contract or document pertains to matters which are within the jurisdiction of the said public service commissions. Nothing in this act contained shall be deemed to apply to or operate upon interstate or foreign commerce.

§ 87. **Repeal.**— The following acts and parts of acts, together with all other acts amendatory of such acts, and all acts and parts of acts otherwise in conflict with this act, are hereby repealed;

Laws of 1905, chapter 737.
Laws of 1905, chapter 728.
Laws of 1904, chapter 158.
Laws of 1902, chapter 373.
Laws of 1896, chapter 456.
Laws of 1894, chapter 452.
Laws of 1892, chapter 534.
Laws of 1891, chapter 4, sections 1, 2 and 3.
Laws of 1890, chapter 565, sections 150 to 172 inclusive.
Laws of 1890, chapter 566, sections 62, 63 and 64.

§ 88. **Appropriation.**— There shall be appropriated for the use of the commissions, and for the payment of salaries and disbursements under this act, from money not otherwise appropriated, the sum of three hundred thousand dollars, one hundred and fifty thousand dollars for the use of the commission of the first district and one hundred and fifty thousand dollars for the use of the commission of the second district.

§ 89. **Time of taking effect.**— This act shall take effect July first, nineteen hundred and seven.

APPENDIX L.

THE RAPID TRANSIT ACT.

APPENDIX L.

THE RAPID TRANSIT ACT.

Laws 1891, chapter 4; as amended and supplemented by Laws 1892, chapters 102 and 556; Laws 1894, chapters 528 and 752; Laws 1895, chapter 519; Laws 1896, chapter 729; Laws 1900, chapter 616; Laws 1901, chapter 587; Laws 1902, chapters 533, 542, 544 and 584; Laws 1904, chapters 562 and 564; Laws 1905, chapters 599 and 631; and Laws 1906, chapters 109, 472, 606 and 607.

LAWS 1891, CHAP. 4.

AN ACT to provide for rapid transit railways in cities of over one million inhabitants.

Approved by the Governor, January 31, 1891. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

§ 1. In each city having over one million of inhabitants, according to the last preceding national or state census, there shall be a board of rapid transit railroad commissioners in and for such city, which shall consist of the mayor of such city, the comptroller or other chief financial officer of such city, the president of the chamber of commerce of the state of New York, by virtue of his office, and the following named persons, to wit: William Steinway, Seth Low, John Claflin, Alexander E. Orr and John H. Starin. The members of said board shall be styled commissioners of rapid transit. Vacancies which may take place in the offices so held by the persons specifically named herein as such commissioners shall be filled by a majority vote of the remaining members of said board. Provided, however, that vacancies which may at any time after the first day of January, nineteen hundred and six take place in the offices so held by the persons specifically named herein as such commissioners, or by their successors heretofore elected, shall be filled by the mayor of such city, and any person so hereafter appointed by the mayor of such city to fill any such vacancy shall be a citizen of the United States and of the state of New York and a bona fide resident of the city in which such person is appointed. The board thus constituted shall have and exercise the specific authority and powers hereinafter conferred and also such other and necessary powers as may be requisite to the efficient performance of the duties imposed upon said board by this act. (*Laws* 1891, *ch.* 4, § 1, *as amended by L.* 1894, *ch.* 752, § 1, *and L.* 1906, *ch.* 472, § 1.)

§ 2. Each of the said commissioners other than the mayor and comptroller or other chief financial officer of such city shall take and subscribe

an oath faithfully to perform the duties of his office, which oath shall be filed in the office of the clerk of any county within which there shall be a city of the class mentioned in the first section of this act. (*Laws* 1891, *ch.* 4, § 2, *as amended by L.* 1894, *ch.* 752, § 2.)

§ 3. Within twenty days after the filing of the oaths of said commissioners so required to make and file the same the commissioners of rapid transit in respect to each of such cities shall meet and organize as a board. The board when so organized, may frame and adopt by-laws not inconsistent with this act, and establish suitable rules and regulations for the proper exercise of the powers and duties hereby conferred and imposed, and may, from time to time, amend the same. Four members of the board shall constitute a quorum for the transaction of business, but a less number may adjourn meetings. The said board shall adopt a seal, and keep a record of its proceedings, which shall be a public record and be open to inspection at all reasonable times. (*Laws* 1891, *ch.* 4, § 3, *as amended by L.* 1894, *ch.* 752, § 3.)

§ 4. The said board upon its own motion may proceed, from time to time, to consider and determine whether it is for the interest of the public and of the city in which it is appointed, that a rapid transit railway or railways for the conveyance and transportation of persons and property should be established therein, and upon the request in writing of the local authorities of any such city at any time, the said board shall proceed forthwith to consider and determine the same questions, and in each case the said board shall conduct such an inquest and investigation as may be deemed necessary in the premises. If, after any such consideration and inquest, the said board shall determine that a rapid transit railway or railways, in addition to any already existing authorized or proposed are necessary for the interest of the public, and such city, it shall proceed to determine and establish the route or routes thereof and the general plan of construction. Such general plan shall show the general mode of operation and contain such details as to manner of construction as may be necessary to show the extent to which any street, avenue or other public place is to be encroached upon and the property abutting thereon affected, and the concurrent votes of at least six* members of the board shall be necessary for the purpose of determining and establishing such route or routes and plan of construction. The said board, from time to time, may locate the route or routes of such railway or railways over, under, upon, through and across any streets, avenues, bridges, viaducts, rivers, waters and lands within such city, including blocks between streets or avenues or, partly over, under, upon, through and across any streets, avenues, bridges, viaducts, and lands within such city and partly through blocks between streets or avenues; provided that the consent of the owners of one-half in value of the property bounded on and the consent also of the local authorities having control of that portion of a street, bridge, viaduct, or highway, upon which it is proposed to construct or operate such railway or railways be first obtained, or in case the consent of such property owners cannot be obtained, that the determination of three

* It is enacted by section 10 of chapter 752 of the Laws of 1894, that "whenever it is expressly provided in the act hereby amended that any act of the board of rapid transit railroad commissioners shall be done by the concurrent vote of four of the members of said board, the act hereby amended is further amended so as to provide in such cases that such vote shall be that of six of such members." This amendment operates upon the fourth, eleventh, fourteenth and twentieth sections of the Rapid Transit Act of 1891 (chap. 4).

commissioners, appointed by the general term of the supreme court in the district of the proposed construction, given after due hearing of all parties interested, and confirmed by the court, that such railway or railways ought to be constructed or operated, be taken in lieu of the consent of such property owners; except that no public park nor any lands or places, lawfully set apart for, or occupied by, any public building of any city or county, or of the state of New York, or of the United States, nor those portions of Grand, Classon, Franklin avenues and Downing street, in the city of Brooklyn, lying between the southerly line of Lexington avenue and northerly line of Atlantic avenue, nor that portion of Classon avenue in said city lying between the northerly line of Lexington avenue and southerly line of Park avenue, nor that portion of Washington avenue in said city lying between Park and Atlantic avenues, nor De Bevoise place, Irving place and Leffert's place, Lee avenue, Nostrand avenue, Waverly avenue, Vanderbilt avenue and Clinton avenue in said city of Brooklyn, nor that portion of the city of Buffalo lying between Michigan and Main streets, nor any part of Fifth avenue in the city of New York, nor that portion of any street or avenue which is now actually occupied by any elevated railroad structure, shall be occupied by any corporation to be organized under the provisions of this act for the purpose of constructing a railway in or upon any of such public parks, lands or places, or upon or along either of the said excepted streets or avenues. It shall be lawful for said commissioners to locate the route of a railway or railways, by tunnel under any such public parks, lands, places, rivers or waters and to locate the route of any railway to be built, under this act, across any of the streets and avenues now occupied by an elevated railroad structure in the city of New York, or across any of the streets or avenues excepted in this act at any point at which in its discretion, the board of rapid transit railroad commissioners may deem necessary in the location of any route or routes, or under, or under and along, any of said streets or avenues now so occupied or so excepted in this act. Nothing in this act shall authorize the construction of an elevated railway on Broadway south of Thirty-third street, nor on Madison avenue in the city of New York. It shall not be lawful to grant, use or occupy, for the purposes of an elevated railroad, except for the purpose of crossing the same any portion of the following named streets and places in the city of New York, that is to say: Second avenue below Twenty-third street; Fourteenth street, between the easterly line or side of Seventh avenue, and the westerly side of Fourth avenue; nor Eleventh street, west of Seventh avenue, nor any part of Bank street; Nassau street; Printing House square, so-called, south of Franklin street; Park row, south of Tryon row; Broad street and Wall street.* (*Laws* 1891, *ch.* 4, § 4, *as amended by L.* 1894, *ch.* 528, § 1, *L.* 1894, *ch.* 752, § 10, *L.* 1895, *ch.* 519, § 1, *L.* 1900, *ch.* 616, *and L.* 1904, *ch.* 564, § 1.)

(2.) The provisions of the said section four of the said act shall, with reference to any rapid transit railroad for which routes and a general plan have been heretofore adopted by the board of rapid transit railroad commis-

* Other streets in the city of New York are exempted by the following statutes:
Laws 1892, ch. 367, exempts Madison avenue, except with the consent of a majority of the property owners, etc.
Laws 1888, ch. 256, as amended by L. 1894, ch. 518, exempts West End avenue above 72d street, Cathedral parkway, Morningside park and streets "bounding on Morningside park in the city of New York, except Tenth avenue and Manhattan avenue;" but "necessary crossings at the intersection thereof with other streets or avenues" are permitted.

sioners of any city and for the municipal construction of which a contract has been heretofore made by any city, be deemed to have been in full force as hereby amended from before the time when the routes and general plan for such railroad or railroads were so adopted by the board of rapid transit railroad commissioners. (*Added by Laws* 1900, *ch.* 616.)

§ 5. After any determination by said board of any such route or routes and of any general plan of construction of said railway or railways, the said board shall transmit to the board of estimate and apportionment or other board or boards of said city having the control of any street, highway, boulevard, driveway, bridge, tunnel, park, parkway, dock, bulkhead, wharf, pier or public grounds or water which is within or belongs to the city, a copy of said plans and conclusions as adopted. It shall be the duty of such board of estimate and apportionment and of every other such board or boards having such control, upon receiving such copy of plans and conclusions, to appoint a day not less than one week nor more than ten days after the receipt thereof for the consideration of such plans and conclusions, and the said board of estimate and apportionment and every other such board having such control shall, on the day so fixed, proceed with the consideration thereof and may continue and adjourn such consideration, from time to time, until a final vote shall be taken thereon, as hereinafter provided. Within sixty days after the copy of such plans and conclusions adopted by the board of rapid transit railroad commissioners shall have first been received by said board of estimate and apportionment or such other board or boards having such control, a final vote shall be taken thereon, by ayes and nays, according to the number of votes by law pertaining to each member of any such board in the form of a vote upon a resolution to approve such plans and conclusions, and to consent to the construction of a railway or railways in accordance therewith. Upon the adoption of such a resolution by a majority vote of all the members of the said board of estimate and apportionment or other such board or boards having such control according to the number of votes by law pertaining to each member of any such board and the approval of the mayor, the said plans and conclusions shall be deemed to have been finally consented to and adopted, and such consent shall be deemed to be consent of the local authorities of such city; provided, that where in any such city the exclusive control of any street, road, bridge, viaduct, highway or avenue which is to be used or occupied by any railway or railways constructed under the provisions of this act, is by law vested in any local authority other than the board of estimate and apportionment of such city, the approval of the aforesaid plans and conclusions and the consent to the construction of a railway thereunder shall be given by such local authority in place of and if required in addition to such approval and consent by said board of estimate and apportionment and with like effect. Upon obtaining the approval and consent of the local authorities, as above provided, the said board of rapid transit railroad commissioners shall also, unless such approval and consent of local authorities shall have been refused, take the necessary steps to obtain, if possible, the said consents of the property owners along the line of the said route or routes. For the purposes of this act the value of the property bounded on that portion of any street or highway in, upon, over or under which it is proposed to construct or operate such railway or railways, or any part

thereof, shall be ascertained and determined from the assessment roll of the city in which the said property is situated, confirmed or completed last before the local authorities shall have given their consent as above provided. If such consents of property owners cannot be obtained, the said board may, in its own name, make application to the appellate division of the supreme court in the judicial district in which such railway is to be constructed for the appointment of three commissioners to determine and report after due hearing whether such railway ought to be constructed and operated. Two weeks' notice of such application shall be given by daily publication thereof, Sundays and holidays excepted, in six daily newspapers published in the city where such proposed railway is to be constructed, if there be so many newspapers published in said city, and if not, then in all the daily newspapers published in said city. The newspapers in which said publication shall be made shall be designated by the appellate division of the supreme court to which such application is to be made on the application of the commissioners without notice. The said appellate division, upon due proof of the publication aforesaid, shall appoint three disinterested persons who shall act as commissioners, and such commissioners, within ten days after their appointment, shall cause public notice to be given in the manner directed by the said appellate division of their first sitting, and may adjourn from time to time until all their business is completed. Vacancies in such commission may be filled by said appellate division after such notice to persons interested as the appellate division may deem proper, and the evidence taken before as well as after such vacancy occurred shall be deemed to be properly before such commissioners. The said commissioners shall determine, after public hearing of all parties interested, whether such railroad ought to be constructed and operated, and shall report the evidence taken to said appellate division, together with a report of their determination whether such road ought to be constructed and operated, which report, if in favor of the construction and operation of such road, shall, when confirmed by said court, be taken in lieu of the consent of the property owners above mentioned. Such report shall be made within sixty days after the appointment of said commissioners, unless the said court, or a judge thereof, shall extend such time. The board of estimate and apportionment of the city of New York shall, with respect to that city, be hereafter for all purposes of this act and be deemed to be the local authority in control of the streets, roads, bridges, viaducts, highways, avenues, boulevards, driveways, parks, parkways, docks, bulkheads, wharfs, piers and public grounds and waters which are within or belong to the said city; and the consent of such board of estimate and apportionment and the mayor, without the consent of the common council, board of aldermen or other board or officer of the city, shall be the only consent of local authorities required hereunder.* (*Laws* 1891, *ch.* 4, § 5, *as amended by L.* 1895, *ch.* 519, § 2, *L.* 1904, *ch.* 564, § 2, *L.* 1905, *ch.* 631, § 1.)

* Prior to the amendment of 1905, which took effect May 26, 1905, this section provided that a copy of the plans and conclusions of the rapid transit board should be transmitted "to the common council of said city." Chapter 631, Laws of 1905, § 2, provides as follows:

§ 2. This act and all the amendments hereby made to the sections thereof hereby amended, shall be applicable to every grant, franchise or contract heretofore made, authorized or issued by the said board of rapid transit railroad commissioners but not yet consented to by the common council or board of aldermen of the city, as well as to all grants, franchises and contracts hereafter made, authorized or issued by the said board of rapid transit railroad commissioners.

§ 6. When the consents of the local authorities and the property owners, or, in lieu thereof, the authorization of the said appellate division of the supreme court upon the report of commissioners, shall have been obtained, the board of rapid transit railroad commissioners shall at once proceed to prepare detailed plans and specifications for the construction of such rapid transit railway or railways in accordance with the general plan of construction, including all devices and appurtenances deemed by it necessary to secure the greatest efficiency, public convenience and safety, including the number, location and description of stations and plans and specifications for the suitable supports, turnouts, switches, sidings, connections, landing places, buildings, platforms, stairways, elevators, telegraph and signal devices, and other suitable appliances incidental and requisite to what the said board may approve as the best and most efficient system of rapid transit in view of the public needs and requirements, and the said board may, in its discretion, include in said plans provisions for galleries, ways, subways or tunnels for sewers, gas or water pipes, electric wires and other subsurface structures and conductors proper to be placed underground, whenever necessary so to do, in order to permit of the proper construction of any railway herein provided for in accordance with the plans and specifications of the said board, or for any other purpose in furtherance of the public interest or convenience. Stations and station approaches may be under or over streets of the route or cross streets, and the board of aldermen, or other legislative body, of any such city shall have power to regulate by general or special ordinance or resolution, the erection, alteration and maintenance upon or in connection with any building used, wholly or in part for station purposes, or approaches, or any and all structures or parts of structures extending over the whole or any part of any sidewalk or sidewalks adjacent thereto. The board may, from time to time, alter such detailed plans and specifications, but always so that the same shall accord with the general plan of construction; but whenever a contract shall have been made for the construction of any railway herein provided for, no such alteration shall be made by the board without the consent of the contractor and his sureties, except as liberty shall have been reserved in such contract by said board for such alteration. Whenever the construction of any railway, depressed way, subway or tunnel under the provisions of this act shall interfere with, disturb or endanger any sewer, waterpipe, gaspipe, or other duly authorized subsurface structure, the work of construction at such points shall be conducted in the city of New York in accordance with the reasonable requirements of the commissioner of public works, and in other cities in accordance with the reasonable requirements and under the supervision of the officer or local authority having the care of and the jurisdiction or control over such subsurface structures so interfered with, disturbed or endangered. All expenses incidental to such supervision and to the work of reconstructing, readjusting and supporting any such sewer, waterpipe, gaspipe or other duly authorized subsurface structure shall be borne and paid by the company which shall have acquired the right, privilege and franchise to construct, maintain and operate such railway, pursuant to a sale of the same at public auction, as hereinafter provided, if any such sale shall be made by said board. Where under the direction of the said board or in pursuance of any general plan adopted or of any contract made by the said board, galleries, ways, subways or

tunnels shall be constructed to contain sewers, pipes or other subsurface structures, the said galleries, ways, subways or tunnels shall be maintained by the said city and shall be in the care and charge of the said board and subject to such regulations as it shall prescribe not inconsistent with the provisions of this act, and any revenue derived therefrom shall be paid into the treasury of said city, except that where bonds shall have been issued to provide for the cost of construction or equipment of such railroads, such amounts shall be paid to the sinking fund of the city, if there be one, or if not then into the sinking fund, to be established and created out of the annual rentals of said road, as provided in section thirty-seven of this act. Provided, however, that any person or corporation who or which at the time of the construction of the said galleries, ways, subways, or tunnels shall own pipes, subways or conduits in a street, avenue or public place in which said galleries, ways, subways or tunnels shall be constructed pursuant to this act, shall be entitled to the use of such galleries, ways, subways or tunnels for his or its said pipes, subways or conduits in the same manner as the said person or corporation shall be entitled by law to the use of such street, avenue or public place, and that no rent shall be charged for such use, except a reasonable charge to defray the actual cost of maintenance, unless such pipes, subways or conduits shall be of greater capacity than those theretofore owned by such person or corporation in said street, avenue or public place, and that, if the capacity of any such pipe, subway or conduit, so placed in the said galleries, ways, subways or tunnels shall be increased, the rent shall be charged only for such increased capacity; and provided further, that the placing in any such galleries, ways, subways or tunnels of the subways or conduits of any corporation owning subways or conduits for electrical conductors, shall not in any wise affect the right of such corporation to charge and demand such compensation or rent for the use of said subways or conduits by other corporations or individuals as is, or may be, permitted by law. Nothing in this section or contained in the act hereby amended shall be construed as granting, enlarging, changing, or in any manner validating, any right, privilege or franchise, or any claimed or alleged right, privilege or franchise, to maintain, operate, or possess any gas mains, pipes or conductors, or any conduits or conductors for transmission of electricity, or any subsurface structures of any name or nature whatever, in any street, avenue, highway or public place in such city. (*Laws* 1891, *ch.* 4, § 6, *amended by L.* 1894, *ch.* 752, § 4, *L.* 1895, *ch.* 519, § 3, *L.* 1896, *ch.* 729, § 1, *L.* 1902, *ch.* 542, *and L.* 1906, *ch.* 472, § 2.)

§ 7. If, after having secured the necessary consents and after having prepared such detailed plans and specifications as are by this act provided for, it shall not have been determined by vote of the people as provided by sections twelve and thirteen of chapter seven hundred and fifty-two of the laws of eighteen hundred and ninety-four that such railway or railways shall be constructed for and at the expense of such city as hereafter provided, said board shall sell at public auction in the city where said railway or railways are to be built and for the account and benefit of said city the right, privilege and franchise to construct, maintain and operate such railway or railways. Notice of the time and place of such sale shall be published three times a week for at least six successive weeks in at least three daily newspapers published in said city. The board may prescribe all such terms and

conditions of sale as it may deem to be for the interest of the public and of the city in which the railway or railways are to be constructed. The advertisement of sale shall contain only so much of the said terms, plans and specifications for the construction as the said board may think proper, but such advertisement must state at what place the full terms, plans and specifications may be examined, and they shall be subject to examination under such reasonable rules and regulations as the board may prescribe. The terms of sale shall provide for the construction of the railway or railways under the supervision of the board, and for the approval of an engineer or engineers to be appointed, from time to time, by the board, and the corporation or corporations to be organized for the purpose of constructing and operating such railway or railways as in this act provided shall pay such engineer or engineers such salary as may, from time to time, be fixed by the said board of rapid transit railroad commissioners. Such engineer or engineers shall hold their office at the pleasure of the said board. The terms of sale shall require the successful bidder to deposit with the comptroller or chief fiscal officer of the city, in cash or approved securities, such amount as the board may deem sufficient to constitute a guarantee of full compliance with the terms of sale by the purchaser and by the corporation to be formed for the purpose of building and operating said railway as hereinafter provided. Said bids and all rights which may have been acquired thereunder shall become null and void and of no effect, at the option of said board, should there be a failure to organize a corporation to exercise such rights, privileges and franchises as acquired by said terms of sale and this act, or for any violation of any of the requirements of said terms of sale which should be complied with before such corporation is organized and thereupon any deposit which may have been made pursuant to such terms of sale shall be paid into the treasury of such city upon a certificate being made and filed by said board with the public officer with whom such deposit shall have been made, that said bid, and all rights which may have been acquired thereunder, have become null and void and of no effect; and said rights, privileges and franchises shall be again sold by said board, subject to all the provisions of this act regulating such sales. The terms of sale shall require the construction of the road to be begun within a time to be specified in said terms of sale, and to be finished within a certain time thereafter, to be specified therein, and may prescribe the time within which portions of the same shall be begun and finished. The said terms of sale may reserve to the board the power to extend the times for the commencement and completion of the construction of said railway, or of portions of the same, if, in its discretion the said board deem such extension to be for the best interests of the city. In case the corporation formed for the purpose of constructing said railway shall fail to begin or finish the construction within the times for those purposes respectively limited, all rights, privileges and franchises of such corporations to maintain and operate said railway shall be forfeited, and upon such forfeiture being adjudged by the court in a suit brought for that purpose in the name of the mayor, aldermen and commonalty of the city of New York, or such other appropriate corporate title of said city or by said board of rapid transit railroad commissioners, then the said board shall have power to advertise and resell said rights, privileges and franchises and so much of the road as shall have been

constructed by such corporation; such suit shall have preference over all other cases in all courts; and the proceeds of such resale shall be applied first to the payment of the expenses of the resale, and then to the discharge of any liens which may have been created upon such property, and the balance shall be paid over to the said corporation. The terms of sale must provide for the organization by the purchaser or purchasers of such rights, privileges and franchises of a corporation to exercise the same, and to construct, maintain and operate such rapid transit railway or railways, with the powers and subject to the duties and liabilities granted or imposed by this act. The said terms of sale must also specify the amount of the capital of any such corporation, and number of shares of capital stock which such corporation shall be authorized to issue, the percentage to be paid in cash by the subscribers on subscribing for such shares, the maximum amount of the bonded indebtedness which such corporation be authorized to incur, and which may be secured by mortgage upon its property and franchises, and the rates of fares and freight which such corporation may charge and collect for the carriage of persons and property. But the rate of fare for any passenger on said railway from any point on the same northward or southward within the city of New York shall not exceed five cents under any provision of this act. The said board may, if it considers that the public interest requires it to do so, reject all bids and readvertise the said rights, privileges and franchises for sale, with the same or different terms of sale, as often as it may deem necessary in the interest of such city, and shall finally accept that bid which, under all circumstances, in its opinion, is most advantageous to the public and such city; and no bid shall be accepted without the concurrent vote of six members of the board. The terms of sale on any such resale must contain all the provisions required by this act to be inserted in the original terms of sale. Such sale may be adjourned from time to time at the discretion of the board. All sales of such rights, privileges and franchises shall be made for a definite term of years, but the expiration of the term, if sold for the term of years, shall not impair any mortgage or other lien upon the property of such corporation or the rights of any creditor or creditors of such corporation; provided, however, that nothing herein contained shall be so construed as to extend the term for which such rights, privileges and franchises are sold. (*Laws* 1891, *ch.* 4, § 7, *as amended by L.* 1894, *ch.* 752, § 5, *and L.* 1895, *ch.* 519, § 4.)

§ 8. Within one year, and not less than six months, prior to the expiration of any term for which such rights, privileges and franchises shall have been sold, said board shall proceed to resell the right to maintain and operate the said railway. Such sale shall be made in the manner prescribed for the original sale, and the board is empowered to make suitable provisions for securing to the corporation then operating such railway or railways suitable compensation for the railroad structure and appurtenances, and for any other property, real or personal, which the said corporation may own or of which it may be vested at the expiration of the term for which such rights, privileges and franchises were sold. Any corporation theretofore organized under the provisions of this act may be a purchaser on such resale; but if no such corporation be the purchaser, a new corporation shall be formed to maintain and operate said road in the manner prescribed for the organization of a corporation on the original sale, except that the plans and specifi-

cations according to which said railway has been constructed need not be set out at large, but may be referred to as forming part of the articles of association of said new corporation. (*Laws* 1891, *ch.* 4, § 8.)

§ 9. The said board may rent such offices and employ such engineers, attorneys and other persons, from time to time, as it may, in its discretion, deem necessary to the proper performance by it of its duties as in this act prescribed. It may sue in the name and behalf of the city for which it acts as a board. It may in the name of and in behalf of the said city bring action of specific performance or may apply by mandamus to compel the performance within its city by any corporation or person of any duty or obligation with reference to or arising out of the construction or operation of any railroad under, or by reason of, any grant made or right acquired under this act or the acts amendatory hereof or supplementary hereto, or out of or by reason of any contract made or authorized by any board of rapid transit commissioners within its city, or it may in behalf of and in the name of said city bring actions to recover damages for any violation of contract or duty, or for any wrong committed by any such corporation or person by reason of any non-performance or violation of duty under the provisions of this act, or under any contract or stipulation made in pursuance of any provisions of this act. Every action or proceeding brought by the said board, and every action or proceeding in which an injunction is had or sought against the board or the said city, or against any corporation or person who or which shall have entered into a contract under the provisions of this act, or any act supplementary hereto, or amendatory hereof, by reason of any act or thing done, proposed or threatened under or by virtue of any provision of this act, or any act supplementary hereto, or amendatory hereof, or is sought against any corporation or person claiming or claiming to act under any grant or franchise under this act, or any act supplementary hereto or amendatory hereof, and every action or proceeding in which the constitutionality of any part of this act, or of any act supplementary hereto, or amendatory hereof, shall or may be brought in question, shall have a preference above all causes not criminal on the calendar of every court, and may be brought on for trial or argument upon notice of eight days for any day of any term on which the court shall be in session. (*Laws* 1891, *ch.* 4, § 9, *as amended by L.* 1894, *ch.* 752, § 6, *and L.* 1895, *ch.* 519, § 5.)

§ 10. The board of estimate and apportionment or other board or public body on which is imposed the duty, and in which is vested the power, of making appropriations of public moneys for the purposes of the city government in any city in which it is proposed to construct such railway or railways shall from time to time, on requisition duly made by the board of rapid transit railroad commissioners, appropriate such sum or sums of money as may be requisite and necessary to properly enable it to do and perform, or cause to be done and performed, the duties herein prescribed, and to provide for the compensation of such commissioners, and such appropriation shall be made forthwith upon presentation of a requisition from the board of rapid transit railroad commissioners, which shall state the purposes for which such moneys are required by the said board. In case the said board of estimate and apportionment or such other board or public body fail to appropriate such amount as the board of rapid transit railroad commis-

sioners deem requisite and necessary, the said board of rapid transit railroad commissioners may apply to the general term of the supreme court, in the department in which the railway is to be or has been constructed, on notice to the board of estimate and apportionment, or such other board or public body aforesaid, to determine what amount shall be appropriated for the purposes required by this section, and the decision of said general term shall be final and conclusive; and no city shall be liable for any indebtedness incurred by the said board of rapid transit railroad commissioners in excess of such appropriation or appropriations. It shall be the duty of the auditor and comptroller of any such city, after such appropriations shall have been duly made, to audit and pay the proper expenditures and compensation of said commissioners, upon vouchers therefor, to be furnished by the said commissioners, which payments shall be made in like manner as payments are now made by the auditor, comptroller, or other public officers, of claims against and demands upon such city; and for the purpose of providing funds with which to pay the said sums, the comptroller or other chief financial officer of said city is hereby authorized and directed to issue and sell revenue bonds of such city in anticipation of receipt of taxes, and out of the proceeds of such bonds to make the payments in this section required to be made. The amount necessary to pay the principal and interest of such bonds shall be included in the estimates of moneys necessary to be raised by taxation to carry on the business of said city, and shall be made a part of the tax levy for the year next following the year in which such appropriations are made. All expenses of the said board of rapid transit railroad commissioners, including the compensation of said commissioners, so incurred and paid by any city as in this section provided, and for which any city shall be liable, shall be repaid, with interest, by the bidder or bidders at the public sale of the rights, privileges and franchises, as in this act provided, in case said board shall so sell the same, whose bid shall be accepted by the board of rapid transit railroad commissioners, and the terms of such sale shall specify the time when such payment shall be made, as well as the amount thereof. The commissioners, other than the mayor and comptroller or other chief financial officer of such city, shall be paid a reasonable compensation for the duties performed by them, from time to time, under the provisions of this act. The amount of such compensation shall be determined by the general term of the supreme court in the department in which said city shall be located upon application by said board after notice to the mayor of such city. (*Laws* 1891, *ch.* 4, § 10, *as amended by L.* 1894, *ch.* 752, § 7.)

§ 11. A corporation or corporations to construct and operate such rapid transit railway or railways, and to enjoy and exercise the rights, privileges and franchises in this act provided for shall be created and organized in the manner following: Articles of association shall be duly signed and acknowledged by not less than twenty-five persons, and such articles shall set forth the name of the proposed corporation and duration thereof. Said articles must also state that they are made and filed under and in pursuance of this act for the purpose of taking and exercising the rights, privileges and franchises so purchased as aforesaid, according to the terms of sale; and such terms of sale and all plans and specifications must be made a part of said articles, annexed thereto and filed therewith. The said articles must also contain such other provisions as the said board may deem requisite and

necessary, not inconsistent with the terms of sale or with this act. The said articles must be approved by said board, by the concurrent vote of six members, and its approval must be endorsed thereon and attested by the seal of the board and the signature of its presiding officer, and must then be filed in the office of the secretary of state, and a duly certified copy, or a duplicate thereof, must be filed in the office of the clerk of the county in which such railway or railways are to be constructed. Immediately after the articles of association shall have been so made, approved and filed, the board of rapid transit railroad commissioners shall cause books of subscription to the capital stock of any such corporation to be opened, and shall give public notice of the opening of such books and of the time and place at which subscriptions will be received; and when the full amount of such capital stock shall have been subscribed by not less than fifty persons, and such percentage of the amount subscribed as may have been fixed by the board in the terms of sale shall have been paid in, in cash, to such bank or trust company as the board may select, the said board shall call a meeting of the subscribers for the purpose of organizing the corporation, serving upon or mailing to each subscriber a notice of such meeting at least ten days before the time appointed for holding the same; and the person or persons whose bid shall have been accepted by the said board of rapid transit railroad commissioners shall, if they elect to become subscribers to the capital stock of such corporation, be entitled to a preference for themselves and their associates in subscribing for, and in the allotment of the shares of capital stock of such corporation. (*Laws* 1891, *ch.* 4, § 11, *as amended by L.* 1894, *ch.* 752, § 10.)

§ 12. At such meeting of subscribers thirteen directors of the corporation shall be elected, each of whom shall be a holder in his own right of at least one hundred shares of the capital stock of the corporation, and the board of rapid transit railroad commissioners shall appoint the the* inspectors of the first election. Each share of stock shall entitle the holder to one vote for each director. The directors so selected shall hold office for one year and until others are elected in their places. At such meeting by-laws must be adopted, not inconsistent with this act, which by-laws shall, among other things, provide for:

1. The term of office of the directors elected at any subsequent meeting of stockholders, which term shall not exceed one year.

2. The manner of filling any vacancy which may occur in any office or in the board of directors.

3. The time and place of the annual meeting of stockholders.

4. The manner of calling and holding special meetings of stockholders.

5. The number of stockholders who shall attend either in person or by proxy, at any stockholders' meeting in order to constitute a quorum.

6. The officers of the corporation, the manner of their election by the directors, and their duties and powers, and among which officers there shall be included a president, a secretary and a treasurer.

7. The manner of electing or appointing inspectors of election.

8. The manner of amending the by-laws.

The by-laws may also provide for the forfeiture of shares for the nonpayment of calls and for such other matters as may be deemed proper by

* So in the original.

the board of rapid transit railroad commissioners and they must be approved by a resolution of said board. (*Laws* 1891, *ch.* 4, § 12.)

§ 13. Within ten days after the said subscribers' meeting a record of the proceedings thereof, containing a copy of the subscription list, a copy of the by-laws adopted, and the names of the directors chosen, shall be prepared and duly certified by the person presiding over, and person acting as secretary of said meeting. There shall be attached thereto a certificate of the board of rapid transit railroad commissioners, attested by its seal and the signature of its presiding officer, that said board has approved the by-laws adopted at the subscribers' meeting, and that said corporation has been organized in accordance with the provisions of this act. The said record and certificate shall be filed by said board in the office of the secretary of state, and a duly certified copy or duplicate thereof shall be filed in the office of the clerk of the county in which said railway or railways are to be built, and thereupon and upon the payment to the state treasurer of a tax of one-eighth of one per centum of the par value of the capital stock of said corporation, such corporation shall be deemed to be fully organized. A copy of said certificate, duly certified by the secretary of state, or by the county clerk in whose office it is filed, shall be presumptive evidence of the due organization of such corporation in all courts and proceedings. Upon the production of the certified copy of said certificate, and upon the order of such corporation, the bank or trust company in which the percentage of subscriptions to the capital stock shall have been deposited, shall pay over to any such corporation the amount of such deposits, and said corporation shall repay to the purchaser or purchasers at the sale provided for in section seven of this act, the expenses paid by him or them to the city pursuant to the provisions of the terms of sale, with interest to the date of such re-payment. (*Laws* 1891, *ch.* 4, § 13.)

§ 14. The said board of rapid transit railroad commissioners, if, in their judgment, the public interest requires, may, at any time after the full organization of any such corporation, by the concurrent vote of six members, authorize such corporation to alter or add to the detailed plans and specifications contained in its articles of association, provided the plans and specifications as so modified do not change the route or routes of said railway and be not inconsistent with the general plan of construction, adopted under the provisions of section four of this act, and provided also such modifications be first approved by a vote of two-thirds of the directors of said corporation present and voting at any special meeting duly called for the purpose, by written notice stating the nature of the business to be transacted at said meeting. When such authorization by the board of rapid transit railroad commissioners shall have been given, a certificate shall be prepared, and acknowledged by the president and a majority of the directors of said corporation, stating the nature of the modification, and that the same has been approved by the board of directors in the manner above set forth, to which certificate there shall be attached a copy of so much of the original plans and specifications as are to be affected by the modification, and also the plans and specifications as modified. There shall also be contained in such certificate a declaration of the approval of said board of rapid transit railroad commissioners, attested in the same manner as the certificate of full organization. The said certificate, plans and specifications shall then be filed in the office of the secretary of state, and a certified copy or duplicate

thereof shall be filed in the office of the clerk in which the articles of association are filed. And thereupon said corporation shall be authorized to construct its railway or railways and appurtenances in accordance with such modified plans and specifications. (*Laws* 1891, *ch.* 4, § 14, *as amended by L.* 1894, *ch.* 752, § 10.)

§ 15. Every corporation organized under this act shall have its principal office and be taxed on its property in the city where its railway or railways are situated. But no taxes of any kind or nature shall be levied or imposed upon that portion of any railway constructed under this act which is in process of construction, and not in actual operation for the transportation of passengers or freight, but this exemption from taxation during construction shall not apply to any portion or portions of said railway after the date on which said portion or portions shall have been opened to the public for the transportation of passengers or freight. (*Laws* 1891, *ch.* 4, § 15, *as amended by L.* 1892, *ch.* 556, § 3.)

§ 16. The affairs of said corporation shall be managed by a board of thirteen directors, who shall be chosen annually, by a majority of the votes of the stockholders voting at such election, in such a manner as may be prescribed in the by-laws of the corporation, and they may and shall continue to be directors until others are elected in their places. In the election of directors, each stockholder shall be entitled to one vote for each share of stock held by him. Vacancies in the board of directors shall be filled in such a manner as shall be prescribed by the by-laws of the corporation. No person shall be a director unless he shall be a stockholder owning one hundred shares of stock absolutely in his own right, and qualified to vote for directors at the election at which he shall be chosen. At every election of directors the books and papers of such corporation shall be exhibited to the meeting, provided a majority of the stockholders present shall require it. (*Laws* 1891, *ch.* 4, § 16.)

§ 17. The directors shall require the subscribers to the capital stock of the company to pay the amount by them respectively subscribed in money at such times and in such instalments as they may deem proper, not inconsistent with the by-laws and the articles of association. (*Laws* 1891, *ch.* 4, § 17.)

§ 18. Each stockholder of any corporation formed under this act shall be individually liable to the creditors of such corporation, to an amount equal to the amount unpaid on the stock held by him, for all the debts and liabilities of such corporation, until the whole amount of the capital stock so held by him shall have been paid to the corporation; and all the stockholders of any such corporation shall be jointly and severally liable for the debts due or owing to any of its laborers and servants, other than contractors, for personal services, for thirty days' service performed for such corporation, but shall not be liable to an action therefor before an execution or executions shall be returned unsatisfied in whole or in part against the corporation, and the amount due on such execution or executions shall be the amount recoverable, with costs, against such stockholders; before such laborer or servant shall charge such stockholder for such thirty days' service, he shall give him notice in writing within twenty days after the performance of such service, that he intends so to hold him liable, and he shall commence such action therefor within thirty days after the return of such execution

unsatisfied, as above mentioned; and every such stockholder against whom any such recovery by such laborer or servant shall have been had, shall have a right to recover the same of the other stockholders in said corporation, in ratable proportion to the amount of the stock they shall respectively hold. (*Laws* 1891, *ch.* 4, § 18.)

§ 19. The stock of every corporation formed under this act shall be deemed personal estate, and shall be transferable in the manner prescribed by the by-laws of the company, but no share shall be transferable until all previous calls thereon shall have been fully paid in. (*Laws* 1891, *ch.* 4, § 19.)

§ 20. Any corporation formed under this act may increase or reduce its capital stock from time to time upon obtaining the approval of the board of rapid transit railroad commissioners by a concurrent vote of six members thereof. Such increase or reduction must be approved by a vote in person, or by proxy, of two-thirds in amount of all the stockholders of the corporation, at a meeting of such stockholders called by the directors of the corporation for that purpose, by a notice in writing to each stockholder, to be served on him in the manner provided for service of the notice of the subscribers' meetings provided for in section eleven of this act. Such notice shall state the time and place of the meeting, and its object, and the amount to which it is proposed to increase or reduce the capital stock. A statement of the increase or reduction shall be signed by the president and a majority of the directors and shall be filed in the office of the secretary of state and of the clerk of the county in which the original articles of association are filed. There must be attached thereto a certificate of the approval of said board of rapid transit railroad commissioners attested in the same manner as the certificate of full organization. (*Laws* 1891, *ch.* 4, § 20, *as amended by L.* 1894, *ch.* 752, § 10.)

§ 21. No person holding stock in any such corporation, as executor, administrator, guardian or trustee, and no person holding such stock as collateral security, shall be personally subject to any liability as a stockholder of such corporation; but the person pledging such stock shall be considered as holding the same, and shall be liable as a stockholder accordingly; and the estate and funds in the hands of such executor, administrator, guardian or trustee shall be liable in like manner, and to the same extent, as the testator or intestate or the ward or person interested in such trust fund would have been if he had been living and competent to act, and held the same stock in his own name. (*Laws* 1891, *ch.* 4, § 21.)

§ 22. As often as any contractor for the construction of any part of a railway, which is in progress of construction under the provisions of this act, shall be indebted to any laborer for thirty or any less number of days' labor performed in constructing said road, such laborer may give notice of such indebtedness to said corporation in the manner herein provided; and said corporation shall thereupon become liable to pay such laborer the amount so due him for such labor, and an action may be maintained against said corporation therefor. Such notice shall be given by said laborer to said corporation within twenty days after the performance of the number of days' labor for which the claim is made. Such notice shall be in writing, and shall state the amount and number of days' labor, and the time when the same was performed and the name of the contractor from whom due, and shall be signed by such laborer or his attorney, and shall be served on an

engineer, agent or superintendent employed by such corporation having charge of the section of the road on which such labor was performed personally, or by leaving the same at the office or usual place of business of such engineer, agent or superintendent with some person of suitable age. But no action shall be maintained against any corporation under the provisions of this section, unless the same be commenced within thirty days after notice is given to such company by such laborers as above provided. (*Laws* 1891, *ch.* 4, § 22.)

§ 23. Every such corporation shall have the right to acquire and hold such real estate or easement or other interest therein, or rights appertaining thereto, as may be necessary to enable it to construct, maintain and operate the said railway, or railways, and such as may be necessary for stations, depots, engine-house, car-houses, machine-shops, and other appurtenances specified in the articles of association; and in case any such corporation can not agree with the owner or owners of such property it shall have the right to acquire title to the same in pursuance of the terms of and in the manner prescribed in title one of chapter twenty-three of the code of civil procedure, known as the condemnation law. (*Laws* 1891, *ch.* 4, § 23.)

§ 24. Every corporation formed under this act shall have power:

1. To take and hold such voluntary grants of real estate and other property as shall be made to it, to aid in the construction, maintenance and accommodation of its railway or railways, but the real estate received by voluntary grant shall be held and used for the purposes of such grant only.

2. To purchase, lease, hold and use all such real estate and other property as may be necessary for the construction and maintenance of its railway or railways, and the stations or other accommodations necessary to accomplish the objects of its incorporation; but nothing herein contained shall be held as repealing or in any way affecting the act, entitled "An act authorizing the construction of railroads upon Indian lands," passed May twelve, eighteen hundred and thirty-six.

3. To cross, intersect, join, and unite its railway or railways with any other railway at any point on its route and upon the grounds of such other railway company, with the necessary turnouts, sidings and switches and other conveniences in furtherance of the objects of its connections. And every corporation whose railway is or shall be hereafter intersected by any new railway, shall unite with the owners of such new railway in forming such intersections and connections, and grant the facilities aforesaid; and if the two corporations can not agree upon the amount of compensation to be made therefor, the same shall be ascertained and determined by commissioners to be appointed by the court, in the manner provided in this act in respect to acquiring title to real estate. And if the two corporations can not agree upon the points and manner of such crossings and connections, the board of rapid transit railroad commissioners shall determine the same on the application of either corporation.

4. To take and convey persons and property on its railway or railways by the power or force of steam, or by any motor other than animal power, and to receive compensation therefor not inconsistent with the provisions of this act, and the terms of sale under which the said corporation shall have acquired its rights, privileges and franchises.

5. To enter upon and underneath the several streets, avenues, public places and lands designated by the said board of rapid transit railroad commissioners, and enter into and upon the soil of the same; to construct, maintain, operate and use, in accordance with the plan adopted by said board, a railway or railways upon the route or routes and to the points decided upon, and to secure the necessary foundations and erect the columns, piers and other structures which may be required to secure safety and stability in the construction and maintenance of the railways constructed upon the plan adopted by the said board, and which may be necessary for operating the same, except that nothing in this act shall authorize the construction of a railway crossing the track of any steam railway in actual operation at the grade thereof, and it shall be lawful to make such excavations and openings along the route through which such railway or railways shall be constructed as shall be necessary from time to time; in all cases the surface of said streets around such foundations, piers and columns shall be restored to the condition in which they were before such excavations were made, as near as may be, and under the direction of the proper local authorities; and in all cases the use of the streets, avenues, places and lands designated by the said board, and the right of way through the same, for the purpose of a railway or railways, as herein authorized and provided, shall be considered, and is hereby declared, to be a public use, consistent with the uses for which the roads, streets, avenues and public places are publicly held; but no such corporation shall have the right to acquire the use or occupancy of public parks or squares in such county, or the use or occupancy of any of the streets or avenues, except such as may have been designated for the route or routes of such railway, and except such temporary privileges as the proper authorities may grant to such corporations to facilitate such construction.

6. From time to time to borrow such sums of money as may be necessary for completing and finishing or operating their railroad, and to issue and dispose of their bonds for such purposes; but the amount of such bonds outstanding at any one time shall not exceed the amount limited by the articles of association. (*Laws* 1891, *ch.* 4, § 24, *as amended by L.* 1892, *ch.* 556, § 4.)

§ 25. Every conductor, baggage master, engineer, brakeman or other servant of any railroad corporation employed in a passenger train, or at stations for passengers, shall wear upon his hat or cap a badge, which shall indicate his office, and the initial letter of the style of the corporation by which he is employed. No conductor or collector, without such badge, shall be entitled to demand or receive from any passenger any fare or ticket, or to exercise any of the powers of his office; and no officer or servant without such badge shall have authority to meddle or interfere with any passenger, his baggage or property. (*Laws* 1891, *ch.* 4, § 25.)

§ 26. Any corporation or person operating a railroad under any provision of this act or of any act supplementary hereto or amendatory hereof, shall, when applied to by the postmaster-general, convey the mails of the United States on their road or roads respectively; and in case the parties cannot agree as to the rate of transportation therefor, and as to the time, rate of speed, manner and conditions of carrying the same, it shall be lawful for the governor

of this state to appoint three commissioners, who, or a majority of them, after fifteen days' notice in writing of the time and place of meeting to the corporation, shall determine and fix the prices, terms and conditions aforesaid; but such price shall not be less for carrying said mails in the regular passenger trains than the amount which such corporation would receive as freight on a like weight of merchandise transported in their merchandise trains, and a fair compensation for the post-office car. And in case the postmaster-general shall require the mail to be carried at other hours, or at a higher speed than the passenger trains are run, the corporation shall furnish an extra train for the mail and be allowed an extra compensation for the expenses and wear and tear thereof, and for the service to be fixed as aforesaid. (*Laws* 1891, *ch.* 4, § 26, *as amended by L.* 1895, *ch.* 519, § 6.)

§ 27. If any passenger shall refuse to pay his fare, it shall be lawful for the conductor of the train and the servants of the corporation to put him and his baggage out of the cars, using no unnecessary force, at any usual stopping place, on stopping the train. (*Laws* 1891, *ch.* 4, § 27.)

§ 28. Every such corporation shall start and run its cars for the transportation of passengers and property at regular times, to be fixed by public notice; and shall furnish sufficient accommodations for the transportation of all such passengers and property as shall, within a reasonable time previous thereto, be offered for transportation at the place of starting and the junction of other railroads, and at usual stopping places established for receiving and discharging way passengers and freight for that train; and shall take, transport and discharge such passengers and property at, from and to such places, on the due payment of the freight or fare legally authorized therefor; and shall be liable to the party aggrieved in an action for damages, for any neglect or refusal in the premises. (*Laws* 1891, *ch.* 4, § 28.)

§ 29. If any person shall, while in charge of a locomotive engine running upon the railway of any such corporation, or while acting as the conductor of a car or train of cars on any such railroad, be intoxicated, he shall be deemed guilty of a misdemeanor. (*Laws* 1891, *ch.* 4, § 29.)

§ 30. If any person or persons shall wilfully do, or cause to be done, any act or acts whatever, whereby any building, construction or work of or on any part of any railroad either constructed or operated under any provision of this act or of any act supplementary hereto or amendatory hereof, or under any provision of any contract made under this act or any act supplementary hereto or amendatory hereof, or any engine, machine or structure, or any matter or thing appertaining to the same, shall be stopped, obstructed, impaired, weakened, injured or destroyed, the person or persons so offending shall be guilty of a misdemeanor, and shall forfeit and pay to the owner of such building, construction, works, engine, machine, structure, matter or thing, treble the amount of damages sustained in consequence of such offense. (*Laws* 1891, *ch.* 4, § 30, *as amended by L.* 1895, *ch.* 519, § 7.)

§ 31. The legislature may, at any time, annul or dissolve any corporation formed under this act; but such dissolution shall not take away or impair any remedy given against any such corporation, its stockholders or officers, for any liability which shall have been previously incurred. (*Laws* 1891, *ch.* 4, § 31.)

§ 32. The said board of rapid transit railroad commissioners may also from time to time, as in this section hereinafter provided, with the approval of the board of estimate and apportionment, or other analogous local authority of such city, grant a right or rights, franchise or franchises or enter into a contract or contracts, upon application to said board of any railroad corporation, now or hereafter incorporated, for the purpose of constructing and operating a tunnel railroad or railroads from an adjoining state under the North or Hudson or Harlem river to a terminus within such city; or under the North or Hudson river and thence transversely across and under the surface of the borough of Manhattan and thence under the East river by the shortest practicable route; such railroad or railroads to be connected with some trunk line railroad or railroads whose terminus or termini are in this or an adjoining state, thereby forming a continuous line for the carriage of passengers and property between a point or points within such adjoining state and a point or points within the said city, provided such purpose is declared in the certificate of incorporation of such corporation. A similar grant may be made, or a similar contract or contracts entered into, upon the application of a railroad corporation, owning or actually operating a trunk line railroad whose terminus or termini are within such city, or of a railroad corporation owning or actually operating, or by the certificate of the board of rapid transit railroad commissioners hereinafter in this section mentioned required to own or actually operate, a railroad wholly or partly within said city and engaged or intended, and in said certificate so recited and required, to be, in interstate commerce in connection with a trunk line railroad and which shall have, or be required by such certificate to have a terminus or termini in said city, for the purpose of constructing and operating a railroad or railroads from such terminus or termini by the shortest practicable route to and under or over the East river or the North or Hudson river, or the Harlem river, to any point in this or an adjoining state, or to connect such terminus or termini with the railroad or terminus of any other such railroad or trunk line railroad in this state or to straighten or improve the grade or alignment of any such railroad or more directly connect any points thereon. If and when in the judgment of said board the public interests so demand, the said board may, with like approval, by the concurrent vote of six of its members, fix and determine the route or routes by which any such railroad corporation making such application may so establish and construct or so extend its lines into or within said city, and may authorize any such railroad corporation to construct and operate any such railroad or connecting railroad under any lands, streets, avenues, waters, rivers, parkways, highways or public places in the said city, and also in the case of any such railroad or connecting railroad which is, or by the terms of the said certificate of the said board of rapid transit railroad commissioners is required to be, operated or used as a part of an interstate trunk line, to construct and operate the same over and across any such lands, waters, rivers, streets, avenues, parkways, highways or public places in the said city, but not over and lengthwise of any streets, avenues or highways, with all necessary sidings, platforms, stations, facilities for access to the surface and other appurtenances and with the right to emerge to the surface upon private lands at the termini, and to transport over the

same passengers or freight or both, and to run over the same either passenger trains or freight trains or mixed trains. The said board shall, with like approval, fix and determine the locations and plans of construction of the railroad or railroads upon such route or routes, the times within which they shall be respectively constructed, the compensation to be made therefor to the city by the railroad corporation to which the grant shall be made, or with which the contract shall be entered into, and such other terms, conditions and requirements as to the said board may appear just and proper, — provided, however, that every such grant shall be made and every such contract entered into upon the condition that the railroad corporation to which the grant shall be made or with which the contract shall be entered into shall, from the time of the commencement of the operation of any such railroad, annually pay to the said city a sum or rental, and that the amount of such sum or rental for a period of not more than twenty-five years, beginning with such operation of any such railroad, shall be prescribed by the said board in such grant or contract and that every such grant or contract shall provide for the readjustment of the amount of such sum or rental at the expiration of the period for which the same shall be so prescribed and for readjustment from time to time in the future of the amount of such annual payment at intervals each of not more than twenty-five years. A certificate shall be prepared by the said board, attested by its seal and the signature of its presiding officer, setting forth in detail the action taken and grant made or contract entered into by the said board with respect to such railroad or railroads and the terms, conditions and requirement aforesaid, including provisions as to the said annual payments and the future readjustments thereof. A like certificate shall be prepared in like manner upon every modification of the terms of the grant or contract as hereinafter provided. Each such certificate shall prescribe the terms and conditions of the readjustments of such annual payments and may provide for the determination of such amount upon such readjustments by arbitration or by the supreme court. Such certificate shall be delivered to said railroad corporation upon the receipt by said board of a written acceptance of the terms, conditions and requirements of the grant or contract, duly executed by said railroad corporation, so as to entitle it to be recorded. The said certificate shall be filed in the office of the secretary of state, and a duly certified copy thereof shall be filed in the office of the clerk of the county in which the said city is situated, and thereupon, and upon fulfillment by such railroad corporation, so far as it relates to such railroad or railroads, of such of the requirements and conditions as are necessary to be fulfilled in such cases, under section eighteen of article three of the constitution of this state, and upon fulfillment by such railroad corporation of such other terms, conditions and requirements enumerated in said certificate, as the said board may require to be fulfilled as a condition precedent to commencing said work, said railroad corporation shall in such cases possess in addition to its already existing franchises all the powers conferred by this act upon corporations specially formed thereunder, with respect to its railways authorized to be constructed as aforesaid, and when any route or routes, rights or franchises, shall be so fixed and determined, and a certificate as aforesaid shall have been duly filed, such railroad corporation may

construct the same with all the rights, and with like effect as though the same had been a part of the original route of its railroad then in actual operation, or as may be provided in said certificate but in every case subject to all the provisions and conditions of the said certificate. Every certificate prepared by the board of rapid transit railroad commissioners as aforesaid when delivered to and accepted by such railroad corporation, shall be deemed to constitute a contract between the said city and said railroad corporation, according to the terms of the said certificate; and such contract shall be enforceable by the said board acting in the name of and in behalf of the said city or by the said corporation according to the terms thereof, but subject to the provisions of this act. The terms of such contract may from time to time, with like approval and with the consent of such corporation, be modified by the board of rapid transit railroad commissioners by the vote of six of its members. But the construction and operation of such railroad or railroads are hereby authorized only upon the condition that the consent of the owners of one-half in value of the property bounded on, and the consent also of the local authorities having the control of that portion of a street or highway upon, above or under which it is proposed to construct or operate the same, be first obtained, provided that such local authorities shall, upon the presentation to them of any such grant or contract, without requiring the execution of any other agreements than those herein provided for, either approve or disapprove the same; and every such approval, shall be and be deemed to be, free of all limitations except those contained in this act or the constitution of the state. In case the consent of such property owners cannot be obtained, the appellate division of the supreme court in the department in which such railroad or railroads are proposed to be constructed, may, upon application, in the same manner and on the same notice specified in section five of this act, appoint three commissioners, who shall determine after a hearing of all parties interested, whether the same ought to be constructed or operated, and their determination, confirmed by the court, may be taken in lieu of the consent of such property owners. Nothing in this act contained shall be construed as interfering in any way with the jurisdiction, powers and duties of the board of railroad commissioners of the state of New York, nor shall any grant or contract be made hereunder affecting in any way the liabilities and obligations of the grantee or contracting railroad corporation with reference to taxation for state or local purposes. The state of New York shall not be liable for injuries to persons or property in connection with any railroad or other construction which may be authorized under the provisions of this act, nor shall the state of New York be liable for any damages in any event for any act or omission of the board of rapid transit railroad commissioners. (*Laws* 1891, *ch.* 4, § 32, *as amended by L.* 1895, *ch.* 519, § 8, *L.* 1902, *ch.* 584, *L.* 1906, *ch.* 472, § 3, *and L.* 1906, *ch.* 606.)

§ 32-a. The said board of rapid transit railroad commissioners may also from time to time, with the approval of the board of estimate and apportionment, upon application of any person, firm or corporation owning, leasing, constructing, or actually operating a railroad wholly or in part within the limits of the city in which the said board has power to act, if in the judgment of said board the public interests so demand, by the concurrent vote of

six of the members of said board, fix and determine the route or routes by which any such person, firm or corporation may connect with other railways, or the stations thereof, or with ferries, or may extend his or its lines within said city, and may with like approval authorize any such person, firm or corporation to lay an additional track or tracks on, above, under or contiguous to a portion or the whole of the route or routes of his or its railway or railways within said city and to acquire terminal or other facilities necessary for the accommodation of the traveling public on any street or place except the place known as Battery park on which said railway shall be located; and may also with like approval authorize any such person, firm or corporation to lay his or its tracks and operate his or its railway to any terminal or terminals within the said city, and to transport over the same passengers or freight or both, and to run over the same either passenger trains or freight trains or mixed trains; and the said board shall with like approval fix and determine the locations and plans of construction of the railways upon such route or routes and of such tracks and facilities, the times within which they shall be respectively constructed, the compensation to be made therefor to the city by said person, firm or corporation, and such other terms, conditions and requirements as to the said boards may appear just and proper, provided, however, that every such determination, authorization and license shall be made upon the condition that such person, firm or corporation shall from the time of the commencement of the operation of any such railway or track or tracks under such determination, authorization or license, annually pay to the said city a sum or rental, and that the amount of such sum or rental for a period of not more than twenty-five years, beginning with such operation of any such railway, track or tracks, shall be prescribed by the said board in such determination, authorization and license, and that every such determination, authorization and license shall provide for the readjustment of the amount of such sum or rental at the expiration of the period for which the same shall be so prescribed and for readjustment from time to time in the future, to the end of the period of renewal, if any, of the amount of such annual payment at intervals each of not more than ten years. No such determination, authorization or license shall be made for a longer period than twenty-five years but may provide for renewal or renewals thereof not to exceed twenty years in the aggregate. A certificate shall be prepared by the said board, attested by its seal and the signature of its presiding officer, setting forth in detail the action taken by the said board with respect to such connecting or extended route or routes and such tracks and facilities, and the terms, conditions and requirements aforesaid, including provisions as to the said annual payments and the future readjustments thereof. A like certificate shall be prepared in like manner upon every modification or renewal of the terms of the contract as hereinafter provided. Every such certificate shall prescribe the terms and conditions of the readjustments of such annual payments and may provide for the determination of such amount upon such readjustments by arbitration or by the supreme court. Such certificate shall be delivered to said person, firm or corporation upon the receipt by said board of a written acceptance of said terms, conditions and requirements, duly executed by said person, firm or corporation, so as to entitle it to be

recorded. The said certificates shall be filed in the office of the secretary of state, and a duly certified copy thereof shall be filed in the office of the clerk of the county in which the said city is situated, and thereupon, and upon fulfillment by such person, firm or corporation, so far as it relates to such connections, additional track or tracks, or facilities, of such of the requirements and conditions as are necessary to be fulfilled in such cases, under section eighteen of article three of the constitution of this state, and upon fulfillment by such person, firm or corporation of such other terms, conditions and requirements enumerated in said certificate, as the said board may require to be fulfilled as a condition precedent to commencing said work, said person, firm or corporation shall in such cases possess in addition to existing franchises all the powers conferred by this act upon corporations specially formed thereunder, with respect to his or its railways authorized to be constructed as aforesaid, and when any route or routes, additional track or tracks, or terminal or other facilities, shall be so fixed and determined, and a certificate as aforesaid shall have been duly filed, such person, firm or corporation may construct the same with all the rights, and with like effect as though the same had been a part of the original route of his or its railway then in actual operation or in process of construction, except that no franchise, right or authority shall be granted under this section to extend any railway, make any connections, lay any additional track or tracks or acquire any terminal or other facilities for a longer period than the original grant, franchise or contract of the railway to which such extension, connection, additional track or tracks, or terminal or other facilities are added. The certificate or certificates prepared by the board of rapid transit railroad commissioners as aforesaid when delivered to and accepted by such person, firm or corporation, shall be deemed to constitute a contract between the said city and said person, firm or corporation according to the terms of the said certificate; and such contract shall be enforceable by the said board acting in the name of and in behalf of the said city or by the said person, firm or corporation according to the terms thereof, but subject to the provisions of this act. The terms of such contract may from time to time, with the consent of such person, firm or corporation, be modified by the board of rapid transit railroad commissioners by the vote of six of its members. But the construction and operation of such connections, extensions, additional track or tracks, or facilities, are hereby authorized only upon the condition that the consent of the owners of one-half in value of the property bounded on, and the consent also of the local authorities having the control of that portion of a street or highway upon, above or under which it is proposed to construct or operate the same, be first obtained, or in case the consent of such property owners cannot be obtained, the appellate division of the supreme court in the district in which they are proposed to be constructed, may, upon application, in the same manner, and on the same notice specified in section five of this act, appoint three commissioners, who shall determine after a hearing of all the parties interested, whether the same ought to be constructed or operated, and their determination, confirmed by the court, may be taken in lieu of the consent of the property owners. Every such certificate granting any franchise, right or authority as aforesaid shall provide that upon the determination thereof

all the rights of property of the grantee in the streets, avenues, parkways, highways and public places shall cease and terminate without compensation and shall further provide that upon such termination of such franchise, right or authority the plant and structure, together with the appurtenances thereto, of the grantee constructed pursuant to such certificate, except rolling stock and other movable equipment, shall become the property of the city without further or other compensation to the grantee; but such certificate may provide that upon such termination there shall be a fair valuation of the rolling stock and other movable equipment which shall be and become the property of the city on the termination of the grant on paying the grantee such valuation. The provisions of this section shall apply to any railroad or railroads constructed, constructing or contracted for under the provisions of section thirty-four of this act, and to any person, firm or corporation constructing or operating such railroad or railroads. (*New section, Laws* 1906, *ch.* 472, § 4.)

§ 33. Wherever or whenever the route selected by the said board of rapid transit railroad commissioners for the construction of such railway shall intersect, cross or coincide with any railway track or tracks occupying the surface of any street or avenues, or the construction or operation of said railway shall interfere with any pipes, sewers, subways, or underground conduits or ways, any corporation organized under this act, or any contractor or person constructing any railway or part of a railway under any contract made with the board of rapid transit railroad commissioners, is hereby authorized, for the purpose of constructing the said work, to remove the track or tracks of any such surface railway or railways, or any such pipes, sewers, subways, or underground conduits or ways, but the same shall be done in such manner as to interfere as little as possible with the practical operation or workings of such surface railway or railways, or the works or business of the owners of any such pipes, sewers, subways, or underground conduits or ways, and upon the construction of such railways built under and in conformity with the provisions of this act, where such removals or changes have been made, said track or tracks, pipes, sewers, subways or underground conduits or ways shall be restored as nearly as may be to the condition in which they were previous to the construction of any such railway built under the provisions of this act, and any damages which such company or companies or owners may sustain shall be ascertained by a commission to be appointed the same as in the case where lands are taken for the purpose of a railway route or routes as hereinbefore provided in this act. For the purpose of the construction or operation of any railway under the provisions of this act, the board of rapid transit railroad commissioners may remove or cause to be removed, any pipes, sewers, subways or underground conduits or ways underneath any street, highway, park, or public place; provided, however, that the same shall be replaced as soon as practicable, either in the same position as before or in a secure and convenient position underneath such street, highway or public place, or underneath such other street, highway or public place as may be approved by the head of the department of public works of the city. Provided, however, that nothing in this section contained shall authorize the permanent removal from any street, highway, park or public place of any subways or conduits for the reception of electrical

conductors which shall have been placed in such street, highway or public place prior to the construction of the rapid transit railroad, without the consent of the owner and lessee of such subway or conduit. All such removals and restorations shall be made at the proper cost and charge of such corporation, contractor or person as may have made such removals, but subject to the provisions of its, his or their contract, if any, with the board of rapid transit railway commissioners. Nothing contained in this act shall authorize any corporation formed thereunder to use the tracks of any horse railway. For the purpose of facilitating construction, and to diminish the period of occupancy of any street for the transportation of material, any contractor acting under a contract made in pursuance of this act, or of any act supplementary hereto or amendatory hereof, may, with the approval of the board of rapid transit railroad commissioners, lay upon or over the surface of any street, temporary tramways, to be used only for the removal of excavated materials or the transportation of material for use in the construction; provided, however, that any such tramway shall be forthwith removed upon the direction of the board of rapid transit railroad commissioners; and provided, further, that this provision shall not be construed to authorize the construction or operation of any street railroad or to grant to any corporation, association or individual the right to lay down railroad tracks. (*Laws* 1891, *ch.* 4, § 33, *as amended by L.* 1895, *ch.* 519, § 9, *L.* 1896, *ch.* 729, § 2, *and L.* 1904, *ch.* 564, § 3.)

§ 34. In case the people shall determine by vote, as provided in sections twelve and thirteen of chapter seven hundred and fifty-two of the laws of eighteen hundred and ninety-four, that any such railway or railways shall be constructed for and at the expense of such city, then and in that event it shall be the duty of said board to consider the routes, plans and specifications, if any, previously laid out and adopted by them or their predecessors, and for which the consents have been obtained referred to in section five of this act; and either to proceed with the construction of such railway or railways, and provide for the operation of the same, as hereinafter provided, or to change and modify the said routes, plans or specifications in such particulars as to said board may seem to be desirable, or from time to time and with or without reference to former routes or plans to adopt other or different or additional routes, plans and specifications for such railway or railways, provided always, that in all cases in which any such change or modification shall be of such character as to require the consents thereto referred to in section five of this act; and in all cases where other or different routes or general plans may have been so adopted the said board shall proceed to secure the consents required to be obtained by section five of this act as herein set forth. If any city has been or shall have been formed by the union or consolidation of one or more cities and other territory, and if in or for one of such cities so consolidated or united there shall have been a board of rapid transit railroad commissioners as provided in this act the board of rapid transit railroad commissioners for the said city formed by such union or consolidation shall have for and within such city so formed all the powers, and be subject to all the duties and responsibilities which at the time of such union or consolidation belonged to the board of rapid transit railroad commissioners of the former city so as aforesaid possessing

such board for or in or with respect to such former city. If in such former city the vote of the qualified electors thereof shall have been for municipal construction of rapid transit road as prescribed in sections twelve and thirteen of chapter seven hundred and fifty-two of the laws of eighteen hundred and ninety-four, then the system of municipal construction of rapid transit railways provided for in this act and all of the provisions with respect thereto in this act contained shall be applicable to, and in full force within, all the districts or boroughs and throughout the entire area of the said city formed by such union or consolidation. The board of rapid transit railroad commissioners for any city shall, prior to the time of the final grant of any franchise under the provisions of this act or the making of a contract for construction of any railroad under the provisions of this act, have power to rescind and revoke any resolution or resolutions of such board adopting any routes or general plan for a rapid transit railroad adopted by such board and, in the discretion of such board, in lieu thereof to adopt new routes and general plan. Every such rescindment or revocation which shall have been heretofore made shall be deemed to have been lawful and authorized by this act as the same was prior to the present amendment hereof. As soon as such consents, where necessary, shall have been obtained for any rapid transit railroad or railroads, and the detailed plans and specifications have been prepared as provided in section six of this act, the said board, for and in behalf of said city, shall enter into a contract with any person, firm or corporation which in the opinion of said board shall be best qualified to fulfill and carry out said contract, for the construction of such road or roads, including such galleries, ways, subways and tunnels for subsurface structures as said board may include in the plans for such road or roads under the authority of section six of this act; upon the routes and in accordance with the plans and specifications so adopted, for such sum or sums of money, to be raised and paid out of the treasury of said city, as hereinafter provided, and on such terms and conditions, not inconsistent with the aforesaid plans and specifications, as said board shall determine to be best for the public interests. The sum or sums of money to be paid for the construction of such road or roads shall be separately stated in the contract from the sum or sums to be paid for any galleries, ways, subways or tunnels for subsurface structures, the construction of which is provided for in such contract. And said board may in any case contract for the construction of the whole road, or all the roads provided for by the aforesaid plans in a single contract, or may by separate contracts, executed from time to time, or at the same time, with one or more such persons, firms or corporations provide for the construction of parts of said road or roads or for the construction at first of two or more tracks over a part or parts of such road or roads and afterwards of one or more additional tracks over a part or parts of such road or roads as the necessities of said city and the increase of its population or the advantageous and economical performance of the work may in the judgment of said board require. The board may also, in a contract for a part of any such rapid transit railroad, insert a provision that, at a future time, upon the requirement of the board, the contractor shall construct the remainder or any part of the remainder of said road, as the growth of population or the interests of the city may, in the judgment of

the board, require, and may, in such contract, insert a provision of a method for fixing and ascertaining at such future time the amount to be paid to the contractor for such additional construction, and to the end of such ascertainment, may provide for arbitration or for determination by court of the amount of such compensation, or of any other details of construction which shall not be prescribed in the contract, but which shall be deemed necessary or convenient by said board. Any such contract may provide, if the public interest shall, in the opinion of the board, justify the provision, that the construction of any section or portion of the railroad included in such contract may, with the consent of the board, be suspended during the term of operation of the railroad as hereinafter mentioned, or any part of such term; provided that during such term or part of term there shall be available for use, in lieu of such portion of the road, a railroad or a portion or section thereof, which shall, with the railroad or portion of railroad constructed under such contract, form a continuous and convenient route. Any such contract may be made for the construction of said road in sections, or for the construction of any section or sections thereof; and, except as herein otherwise provided, every such contract shall specify when the construction of the railroad or the section or sections thereof included therein shall be commenced in each case, and, in each case, the date of completion. The said board may by any such contract determine when and how the work of construction of the rapid transit railroad or railroads included therein shall proceed. The said board of rapid transit railroad commissioners may also provide for the equipment at public expense of such railroad or railroads in connection with the construction thereof, and may include in any contract for construction authorized by this act provision for the equipment, or any part thereof, of such railroad or railroads, but may make a separate contract or contracts for the whole or any part of such equipment with the constructing contractor or contractors or any other responsible persons, firms or corporations. (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by L.* 1895, *ch.* 519, § 10, *L.* 1896, *ch.* 729, § 3, *L.* 1900, *ch.* 616, § 1, *L.* 1902, *ch.* 544, *L.* 1905, *ch.* 599, § 1, *and L.* 1906, *ch.* 472, § 5.)

§ 34-a. The board of rapid transit railroad commissioners shall, subject to the approval of the board of estimate and apportionment, or other analogous local authority of such city, have full power and authority to provide for the maintenance, supervision, care and operation of the railroad or railroads, including the aforesaid galleries, ways, subways and tunnels for subsurface structures and all other appurtenances, constructed or to be constructed for and at the expense of such city pursuant to the provisions of this chapter, and may, with like approval, enter into a contract with any person, firm or corporation, who or which in the opinion of said board of rapid transit railroad commissioners shall be best qualified to fulfill and carry out said contract, for the equipment, or any part thereof not provided for pursuant to the next preceding section of this act, of such road or roads, at his or its own cost and expense, and for the maintenance and operation of such road or roads for a term of years to be specified in said contract and not to exceed twenty years. Every such contract shall contain such terms and conditions as to the rates or fare to be charged and the character of services to be furnished and otherwise as said board of rapid transit railroad

commissioners shall deem to be best suited to the public interests, and subject to such public supervision and to such conditions, regulations and requirements as may be determined upon by said board, with like approval; provided, that in case different parts of a road shall be constructed at different times or at intervals of time, or if the contract shall provide for the use by the contractor of an existing railroad as part of a continuous route as aforesaid, then and in any such case the board of rapid transit railroad commissioners may, in its discretion, prescribe periods for the operation of the different parts of said road so that at one period of time in the future the board may be enabled to make a single operating contract or lease of the entire road. Every such contract shall further provide that the person, firm or corporation so contracting to equip, maintain and operate said road shall annually pay into the treasury of said city, as rental for the use of said road, a sum which shall not, except as hereinafter provided, be less than the annual interest upon the bonds to be issued by said city for the construction and equipment of said road as hereinafter provided for, and in addition to said interest, a further sum which shall be equal to a percentage of not less than one per centum upon the whole amount of said bonds; provided, that in estimating such annual interest and additional percentage there shall be deducted from the amount of said bonds the amount thereof issued to pay for rights, terms, easements, privileges or property other than lands acquired in fee, and also the amount thereof issued to pay for the construction of galleries, ways, subways and tunnels for subsurface structures. And provided, further, that the said contract may, in the discretion of the said board, provide that the payment of the said further sum of not less than one per centum upon the amount of said bonds as aforesaid, shall begin at a date not more than five years after the date at which the payment of rental shall begin, and that the said annual rate, instead of one per centum, may be a rate not less than one-half per centum for a further period not exceeding five years; but in case the contractor shall, during any year in which the said payment of one per centum shall be suspended or reduced as aforesaid, earn a greater profit upon his, its or their net capital invested in the enterprise than five per centum, then the surplus of his, its or their earnings for such year up to the extent of at least one per centum shall be paid as rental as aforesaid. Such rental and the term for the operation of the railroad included in any such contract shall begin, as to said road, or any section thereof, when the same shall be declared by the board of rapid transit railroad commissioners to be completed and ready for operation. For the purpose of estimating such one per centum per annum upon the ascertainment of the amount of such rental, there shall be included such portion of the said bonds as shall have been issued to pay interest on bonds theretofore issued under the provisions of this act, except bonds issued to pay for rights, terms, easements, privileges or property other than lands acquired in fee. The aforesaid annual rental shall be paid at such times during each year as said board shall require, and shall be applied first to the payment of the interest on said bonds, as the same shall accrue and fall due, and the remainder of said rental not required for the payment of said interest shall be paid into the sinking fund, for the payment of the city debt, if there shall be such sinking fund in said city, or, if there be none such, then said balance of said rental shall be securely invested, and, with the annual

accretions of interest thereon, shall constitute a sinking fund for the payment and redemption at maturity of the bonds issued, as hereinafter provided. Any such contract may also provide for a renewal or renewals not to exceed twenty years in the aggregate of the lease of said road upon the expiration of the original term upon such terms and conditions, to be approved by the board of estimate and apportionment, or other analogous local authority of such city, as to said board of rapid transit railroad commissioners may seem just and proper, and may also contain provisions for the valuation of the whole or a part of the property of said contracting person, firm or corporation, employed in and about the equipment, maintenance and operation of said road, and for the purchase of the same by the city, at such valuation, or a percentage of the same, should said lease not be so renewed at any time. Such contract shall also state the date on which the operation of the road, or of any section thereof, shall commence. The city in and for which said road shall be constructed shall also have a first lien upon the rolling stock and other property of said contracting person, firm or corporation, constituting the equipment of said road and used or intended for use in the maintenance and operation of the same, as further security for the faithful performance by such contracting person, firm or corporation of the covenant, conditions and agreements of said contract, on his, their, or its part to be fulfilled and performed, and in case of the breach of any such covenant, condition and agreement said lien shall be subject to foreclosure by action, at the suit of such city, in the same manner, as far as may be, as is then provided by law in the case of foreclosure by action of mortgages on real estate. The said board of rapid transit railroad commissioners may, however, from time to time, by a concurrent vote of six of the members of said board, relieve from such lien, any of the property to which the same may attach, upon receiving additional security, which may be deemed by said board so voting to be the equivalent of that which it is proposed to release and otherwise upon such terms as to such board so voting shall seem just. The said contract shall further provide that in case of default in paying the annual sum or rental therein provided for, or in case of the failure or neglect on the part of said contracting person, firm or corporation, faithfully to observe, keep and fulfill the conditions, obligations and requirements of said contract, the said city, by its board of rapid transit railroad commissioners, may take possession of said road and the equipment thereof, and as the agent of said contracting person, firm or corporation, either maintain and operate said road, or enter into a contract with some other person, firm or corporation for the maintenance and operation thereof, retaining out of the proceeds of such operation, after the payment of the necessary expenses of operation and maintenance, the annual rental hereinbefore referred to, and paying over the balance, if any, to the person, firm or corporation with whom the first contract above mentioned was made, and if such proceeds of the operation of said road, after the payment of the necessary expenses of maintenance and operation, including the keeping in repairs of the rolling stock and other equipment, shall in any year be less than the annual rental hereinbefore referred to and provided in the first contract, then and in that case, the said contracting person, firm or corporation, and his or its bondsmen, shall be and continue (but in the case of any bond hereafter executed each bondsman only to the extent of the liability expressly assumed by him

upon the bond) jointly and severally liable to the aforesaid city for the amount of such deficiency, until the end of the full term for which the said first contract was originally made. Any existing railway corporation owning or actually operating a railway wholly or in part within the limits of the city in and for which said board has power to act, and approved by the said board of rapid transit railroad commissioners, shall be competent and is hereby authorized to enter into any contract for the equipment, maintenance and operation of any railway pursuant to the provisions of this chapter, or, after such a contract shall have been made, shall be competent and is hereby authorized, with the approval of the said board, to contract with the original contractor or his assignee or assignees for the maintenance and operation (including the equipment or any part thereof) of any railway constructed or in process of construction pursuant to the provisions of this chapter, and shall have all the powers necessary to the due performance of such contract. A corporation may be organized under the railroad law of this state, for the purpose of maintaining and operating a railway (including the equipment or any part thereof) already constructed or in process of construction pursuant to the provisions of this chapter; and any corporation so organized, upon the approval in writing of the said board of rapid transit railroad commissioners, shall, in addition to the powers conferred by the general act under which such corporation is organized, be empowered, and is hereby authorized to enter into any contract permitted by law for the maintenance and operation when constructed (including the equipment or any part thereof if desired), as the case may be, of any such railway constructed or to be constructed at the expense of the city as in this act provided. The certificate of such approval shall be filed in the office of the secretary of state, and a copy thereof certified to be a true copy by the secretary of state or his deputy, shall be evidence of the fact therein stated. A corporation so organized shall not be required to procure the consent of the board of railroad commissioners of the state as provided for in section fifty-nine of the railroad law. Where in this section or in section thirty-four of this act the consents referred to in section five of this act are mentioned, they shall be construed to include any consent given by the commissioners appointed by the general term or appellate division of the supreme court, and confirmed by the said general term or appellate division in lieu of the consent of property owners as hereinbefore provided. (*New section, Laws* 1906, *ch.* 472, § 6.)

§ 34-b. If in the opinion of the board of estimate and apportionment, or other analogous local authority of such city, a contract for the equipment, maintenance and operation as provided for in the preceding section shall be inexpedient, impracticable or prejudicial to the public interest, the board of rapid transit railroad commissioners may, with the approval of the board of estimate and apportionment, or such other analogous authority, equip the said road or roads in whole or in part, for and at the public expense, by contract or contracts therefor subject to the provisions of section thirty-six of this act, and enter into a contract with any person, firm or corporation, who or which, in the opinion of said board of rapid transit railroad commissioners, shall be best qualified to fulfill and carry out said contract, for the maintenance and operation of such road or roads for a term of years to be specified in said contract, and not to exceed ten years. The provisions

of the foregoing sections in respect of a contract or contracts for the equipment, maintenance and operation of such road or roads shall apply to such contract for maintenance and operation so far as such provisions are pertinent and applicable thereto except that the annual rental to be paid into the city treasury for the use of said road or roads shall be based upon the total amount of bonds issued by said city for the construction and equipment, instead of for the construction alone, of said road or roads as hereinafter provided for and that the renewal or renewals of said contract provided for therein shall not exceed in the aggregate ten years. (*New section, Laws* 1906, *ch.* 472, § 6.)

§ 34-c. Every contract for the construction or operation of such road or roads shall provide by proper stipulations and covenants on the part of the said city, that the said city shall secure and assure to the contractor, so long as the contractor shall perform the stipulations of the contract, the right to construct or to operate the road as prescribed in the contract, free of all right, claim or other interference, whether by injunction, suit for damages or otherwise, on the part of the owner, abutting owner, or other person. The person, firm or corporation bidding or contracting for the construction, equipment, maintenance or operation of the railroad or railroads included in any such contract shall make such deposit of cash or securities and shall give a bond to said city, in such amount as said board of rapid transit railroad commissioners shall require, and with sureties to be approved by said board, who shall justify each in double the amount of his liability upon said bond. Said bond shall be a continuing security, and shall provide for the prompt payment by said contracting person, firm or corporation, of the amount of annual rental, if any, specified in the aforesaid contract, and also for the faithful performance by said contracting person, firm or corporation of all the conditions, covenants and requirements specified and provided for in said contract. In lieu of said continuing bond such contracting person, firm or corporation may, upon the approval of the said board, deposit with the comptroller or other chief financial officer of such city cash equal in amount to the entire amount of the said bond or securities which are lawful for the investment of the funds of savings banks within this state and are worth not less than the entire amount of such bond. If such bond shall have been given then after the deposit of cash and securities in lieu thereof as aforesaid, and the approval thereof by the said board, the said bond shall be surrendered by the said city to the said contracting person, firm or corporation duly canceled by the comptroller or other chief financial officer of the said city. In the event of the deposit of cash or securities as aforesaid, the contract may provide for the payment to the contractor of the income of such securities or of interest upon such moneys at a rate not higher than the highest rate received by the city upon the deposit of its funds with banks, and may also provide for withdrawal of securities so deposited upon deposit of cash or securities of the same value, provided that all such securities shall be such as are so lawful for the investment of the funds of savings banks. The said board may in or by any such contract and in its discretion require, and this act, as the same was prior to the present amendment thereof shall be deemed to have authorized the said board to have heretofore required any other security upon any such contract. No contract entered into under authority of this act shall be

assignee without the written consent of the said board of rapid transit railroad commissioners, concurred in by six members of said board. The said contracting person, firm or corporation, with such written consent and upon such terms and conditions as the said board shall prescribe, may either assign the whole of such contract or separately the right or obligation to maintain and operate the said road or roads for the remainder of the term of years specified in such contract and all rights with respect to such maintenance and operation, or included in the leasing provisions of such contract, but subject to all the terms and conditions therein stated; provided, however, that the assignee or assignees shall, in and by such assignment, assume all of the obligations of the original contractor under or with respect to such leasing provisions and all obligations which relate in any way to such operation and maintenance, and provided, further, that the said board before giving its consent shall be satisfied that the pecuniary responsibility of the assignee or assignees shall be no less than that of such original contractor; and provided, further, that all of the security or securities which the city shall have received for the performance by the original contractor of such leasing provisions and of all provisions of the contract with respect to such operation and maintenance shall continue in full force as provided in such contract, or any modification thereof, as security for the performance by such assignee of all obligations of the contractor under or with respect to such leasing provisions and such maintenance or operation. It shall be deemed to be part of every such contract that, in case the board of rapid transit railroad commissioners shall cease to exist, the legislature may provide what public officer or officers of the city shall exercise the powers and duties belonging to the board of rapid transit railroad commissioners under or by virtue of any such contract, and that in default of such provision, such powers and duties shall be deemed to be vested in the mayor of the city. Every such contract shall provide that if the contracting person, firm or corporation shall fail to construct, equip, maintain or operate the railway according to the terms of the contract, and shall, after due notice of its default, omit for more than a reasonable time to comply with the provisions of such contract, the board of rapid transit railroad commissioners may bring an action in the name and in behalf of the city to forfeit and vacate all the rights of such contracting person, firm or corporation under such contract, and for damages and otherwise as may be necessary for the sufficient and just protection of the rights of the city; or may, upon such terms as to the board of rapid transit railroad commissioners seem just, and with such person or corporation as to the said board may seem proper, make another operating contract and lease of the said road for the residue of the term of the contractor in default; and may bring action in the name and on behalf of the city to recover from the contractor the amount due from the contractor, less the amount which shall have been received by the city, under or by virtue of such new contract, and for all other damages sustained by the city by reason of such default. (*New section, Laws* 1906, *ch.* 472, § 6.)

§ 34-d. If in the opinion of the board of estimate and apportionment, or other analogous local authority of such city, either a contract for equipment, maintenance and operation, or a contract for maintenance and operation as provided for in the preceding sections would be inexpedient, impracticable

or prejudicial to the public interest, the board of rapid transit railroad commissioners shall forthwith devise and prepare a plan for the maintenance and operation of such road or roads, and when said plan shall have been approved by the board of estimate and apportionment, or other analogous local authority of such city, the said board of rapid transit railroad commissioners shall maintain and operate such road or roads for and on behalf of said city. The rates of fare provided for in any operating contract or plan aforesaid shall be adjusted, fixed and readjusted always with a view to securing sufficient receipts therefrom, when added to the net revenues from such galleries, ways, subways or tunnels, and all other sources incidental or appurtenant to the use and operation of said road or roads, to provide for operating expenses, maintenance, interest on the cost, all other proper charges, and a sinking fund to discharge the bonds issued for the construction and equipment of such road or roads within a reasonable period, without recourse to taxation. Whenever it shall seem practicable to reduce rates of fare, the reduction shall in the first instance be in favor of school children, and then, next in order, in favor of all the public between six and nine o'clock ante meridian, and between four and seven o'clock post meridian, and then for all the public from five o'clock ante meridian, until seven o'clock post meridian, and, lastly, for all the public at all times. No part of any road or roads or of its or their appurtenances, constructed under the authority of this act, shall be used for advertising purposes, except that the person, firm or corporation operating such road or roads may use the structure for posting necessary information for the public relative to the running of trains and to the operation of the road or roads. Nor shall any trade, traffic or occupation, other than required for the operation of said road or roads, be permitted thereon or in the stations thereof, except such sale of newspapers and periodicals as may, from time to time, always with the right of revocation, be permitted by the board of rapid transit railroad commissioners. (*New section, Laws* 1906, *ch.* 472, § 6.)

§ 34-e. Nothing contained in this act shall be deemed, or be construed as intending, to limit, or as limiting, in any manner, the discretion of the board of rapid transit railroad commissioners, provided in the opinion of the board of estimate and apportionment, or other analogous local authority of such city, it is expedient, practicable and in the public interest to do so, to enter into contracts for construction, equipment, maintenance and operation with the same person, firm or corporation, or for any one or more of said purposes with the same person, firm or corporation, or with different persons, firms or corporations, either in one contract or in separate contracts, and at any time or times. (*New section, Laws* 1906, *ch.* 472, § 6.)

§ 35. The equipment to be supplied by the person, firm or corporation contracting for the equipment or any part thereof, of any such road shall include all such rolling stock, motors, boilers, engines, wires, ways, conduits and mechanisms, machinery, tools, implements and devices of every nature whatsoever used for the generation or transmission of motive power and including all power houses, and all apparatus and all devices for signaling and ventilation as may be required for the operation of such road and specified

in the contract for such equipment.* (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by L.* 1896, *ch.* 729, § 4, *L.* 1900, *ch.* 616, § 2, *L.* 1905, *ch.* 599, § 2, *and L.* 1906, *ch.* 472, § 7.)

§ 36. The said board of rapid transit railroad commissioners before awarding any contract or contracts shall advertise for proposals for such contracts by a notice to be printed twice a week for three successive weeks in no less than four of the daily newspapers published in said city, and in such newspapers published elsewhere than in said city as said board shall determine. Such notice shall set forth and state the points within said city, between which said road or roads is or are to run, the general method of construction, the route or routes to be followed, the term of years for which it is proposed to make such contract, and such other details and specifications as said board shall deem to be proper. Said notice shall state the time and place at which said proposals will be opened, and the said board shall attend at the time and place so specified, and shall publicly open all proposals that shall have been received, but the said board shall not be bound to accept any proposals so received, but may reject all such proposals and readvertise for proposals in the manner hereinbefore provided, or may accept any of such proposals as will, in the judgment of such board, best promote the public interest, and award a contract accordingly. (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by L.* 1895, *ch.* 519, § 11.)

§ 37. For the purpose of providing the necessary means for such construction, or equipment, or both, as the case may be, at the public expense, of any such road or roads, including galleries, ways, subways and tunnels for subsurface structures, and the necessary means to pay for lands, property, rights, terms, privileges and easements, whether of owners, abutting owners, or others, which shall be acquired by the city for the purposes of the construction or the operation of such road or roads as hereinafter provided and of meeting the interest on the bonds in this section hereinafter provided for accruing thereon prior to the completion and readiness for operation of the portion of such road or roads, and the galleries, ways, subways and tunnels for subsurface structures, for the construction, or equipment of which such bonds shall have been respectively issued, the board of estimate and apportionment, or other local authority in said city, in which such road or roads are to be constructed, having power to make appropriations of moneys to be raised by taxation therein, from time to time, and as the same shall be necessary, and upon the requisition of said board of rapid transit railroad commissioners, shall direct the comptroller, or other chief financial officer of said city, and it shall thereupon become his duty, to issue the bonds of said city at such a rate of interest, as the board of commissioners of the sinking fund of said city, if there be such a board, or if there be no

* Prior to the amendment of 1905 (which took effect May 24, 1905), this section contained the following clause: "Such person, firm or corporation shall be exempt from taxation in respect to his, their or its interest under said contract and in respect to the rolling stock and all other equipment of said road, but this exemption shall not extend to any real property which may be owned or employed by said person, firm or corporation in connection with the said road." The amending act (*Laws* 1905, *ch.* 599, § 3), limited the effect of the repeal of the foregoing clause by the following provision: "Nothing in this act contained shall be held to repeal, modify or alter any provision of the act hereby amended with respect to any railroad or railroads constructed, constructing or contracted for thereunder when this act takes effect; but the act hereby amended shall be and continue in full force and effect in respect of such railway or railways so constructed, constructing or contracted for as if this act had not been passed."

such board then as other local authority directing the issue of such bonds, may prescribe. Said bonds shall provide for the payment of the principal and interest in gold coin of the United States of America. They shall not be sold for less than the par value thereof, and the proceeds of the same shall be paid out and expended for the purposes for which the same are issued, upon vouchers certified by said board of rapid transit railroad commissioners. Said bonds shall be free from all taxation for city and county purposes, and shall be payable at maturity out of the sinking fund for the payment of the city debt, if there be such a sinking fund of said city; but if there be no such sinking fund, then out of a sinking fund to be established and created out of the annual rentals or revenues of said road including galleries, ways, subways, or tunnels for subsurface structures, as hereinbefore provided. But this provision that the said bonds shall be payable out of such sinking fund shall not diminish or affect the obligation of said city as a debtor upon said bonds, or any other right or remedy of any holder or owner of any such bonds, to collect the principal or interest thereof. The amount of bonds authorized to be issued and sold by this section shall not exceed the limit of amount which shall be prescribed by the board of estimate and apportionment or such other local authority having power to make appropriations of moneys to be raised by taxation; and no contract for the construction of such road or roads shall be made unless and until such board of estimate and apportionment or such other local authority shall have consented thereto and prescribed a limit to the amount of bonds available for the purposes of this section which shall be sufficient to meet the requirements of such contract in addition to all obligations theretofore incurred and to be satisfied from such bonds. Before finally fixing the terms and conditions of any contract for any of the purposes contained and set forth in this act, the board of rapid transit railroad commissioners of the appropriate city shall set a date or dates for a public hearing upon the proposed terms and conditions thereof, at which citizens shall be entitled to appear and be heard. No such hearing shall be held, however, until notice thereof shall have been published for at least two weeks immediately prior thereto in the City Record, or other official publication of the city, and at least twice in two daily newspapers published in the city, to be designated by the mayor. It shall be the duty of the board of rapid transit railroad commissioners to cause not less than five hundred copies of a draft of the proposed contract to be printed at least two weeks in advance of such hearing. The said notice of such public hearing shall state where copies of such drafts may be obtained upon payment of a fee, to be fixed by said board, but not to exceed one dollar for each such copy. The said board may, after the hearing to be held as above required, alter, modify or amend such draft contract in any manner in its discretion. (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by L.* 1895, *ch.* 519, § 12, *L.* 1904, *ch.* 562, § 1, *L.* 1906, *ch.* 472, § 8, *L.* 1906, *ch.* 607 *and* § 37, *L.* 1907, *ch.* 534.)

§ 38. The board of rapid transit railroad commissioners for and on behalf of the said city in which such road or roads may be constructed, may, from time to time, with the concurrence of six members of said board and the consent, in writing, of the bondsmen or sureties of the person, firm or

corporation which has contracted to construct, equip, maintain or operate said road or roads, or any of them, agree with said contracting person, firm or corporation upon changes in and modifications of said contract, or of the plans and specifications upon which said road or roads is or are to be constructed, but no change or modifications in the plans and specifications consented to and authorized pursuant to section five of this act shall be made without the further consent and authorization provided for in said section; but in no event shall the annual rental to be paid to said city, for the use of said road, be reduced below the minimum rate hereinbefore provided. (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by L.* 1895, *ch.* 519, § 13, *and L.* 1906, *ch.* 472.)

§ 38 (a)*. The board of directors of any company incorporated for the purpose of constructing, maintaining or operating a bridge or bridges connecting a city of more than one million inhabitants with any other city in this state, and by the act of incorporation of which authority shall have been conferred or intended to be conferred, to construct, maintain or operate, as a part of or in connection with its bridge, an approach or approaches thereto extending generally in an easterly and westerly direction, may determine in lieu of constructing such approach or approaches, to build, maintain and operate an elevated railway, the route of which shall be coincident with the route of such approach or approaches as defined in said act, and shall adopt a general plan for the construction thereof, and which shall show the general mode of operation, and contain such details as to manner of construction as may be necessary to show the extent to which any street, avenue, or other public place is to be encroached upon and the property abutting thereon affected, a copy of which plan shall be transmitted to the common council of the city in which the same is to be located. Such proceedings shall thereupon be had by such common council as are provided by section five of this act, as though such plans had been transmitted by the rapid transit commissioners as contemplated in said section. Provided, that where in any such city the exclusive control of any street, route, highway or avenue, which is to be occupied by any railway or railways constructed under the provisions of this section is by law vested in any local authority other than the common council of such city, the approval of the aforesaid plans and consent to the construction of a railway thereunder shall be given by such local authority in place of, and if required in addition to such approval and consent by such common council, and with like effect. Upon obtaining the approval and consent of the local authorities as in said section provided, the said board of directors shall take the necessary steps to obtain, if possible, the consent of the property owners along the line of the said route or routes, and all proceedings in respect of such consents or when such consents cannot be obtained shall be similar in all respects to the proceedings in said section provided. Any consent of the local authorities to construct or operate such railway shall be given only upon the condition that the rate of fare upon such elevated railway shall not exceed five cents for each passenger, and that payment of such fare

* This section was added to the Rapid Transit Act of 1891 by chapter 102 of the Laws of 1892. Another section numbered 38 was subsequently inserted in the act by Laws of 1894, chapter 752, and hence there were up to the date of the amendment of 1895 (Laws of 1895, chapter 519), two sections of the amended Act similarly numbered.

shall entitle each passenger to or from said elevated railroad to free transit across the bridge or bridges with which it is intended to connect the same. When the consents of the local authorities and the property owners, or in lieu thereof, the authorization of the supreme court upon the report of the commissioners shall have been obtained, and the said company shall have accepted such condition it shall have all the powers of corporations formed under this act, it shall be authorized to build, construct, maintain and operate such elevated railway or railways, but all provisions of this act, or of any act requiring the sale of the right, privilege and franchise of constructing, maintaining and operating such railway or railways, or requiring a corporation or corporations to be organized for the purpose of acquiring such right, privilege and franchise, and all other provisions of this act or of any act inconsistent with this section, are hereby declared inapplicable to such elevated railway and to such company. The entire route of any elevated railway constructed under the provisions of this section shall not exceed three miles in length, nor shall any part of said railway except at the termini thereof be less than sixteen feet above any street, avenue or public place, or less than fourteen feet above any existing elevated railway which may be crossed, intervened or intersected thereby. The said railway may be located and constructed so as to cross any intersecting street, avenue, highway or place otherwise exempted, except that no public park shall be occupied or crossed thereby, the structure of such elevated railway shall be liable to taxation as provided by law for similar structures. (*Laws* 1892, *ch.* 102, *amended as to its number by L.* 1895, *ch.* 519, § 14.)

§ 39. For the purpose of constructing or operating any road for the construction or operation of which a contract shall have been made by the board of rapid transit railroad commissioners, including necessary stations and station approaches, or for the purpose of operating or securing the operation of the same free of interference and right of interference and of action and right of action for damages and otherwise, whether by abutting owners or others, or to provide, lay or maintain conduits, pipes, ways or other means for the transmission of electricity, steam, water, air or other source or means of power or of signals or of messages necessary or convenient for or in the construction or operation of such road, or for the transportation of materials necessary for such construction or operation, or to provide a temporary or permanent way or course for any such conduit, pipe or other means or source of transportation, said board for and in behalf of said city may acquire, by conveyance or grant to said city to be delivered to the said board and to contain such terms, conditions, provisos and limitations as the said board shall deem proper, or by condemnation or other legal or other proceedings, as in this act provided, any real estate and any rights, terms and interest therein, any and all rights, privileges, franchises and easements, whether of owners or abutters, or others to interfere with the construction or operation of such road or to recover damages therefor, which, in the opinion of the board, it shall be necessary to acquire or extinguish for the purpose of constructing and operating such road free of interference or right of interference. The word property hereinafter used shall be deemed to include any such real estate, and any rights, terms and interest therein, and any such rights, privileges, franchises and easements

whether of owners, abutting owners, or others. Where any contractor for the construction or operation of any such railroad shall require any property for such construction and operation, such property shall be deemed to be required for a public purpose; and with the approval of the said board of rapid transit railroad commissioners the same may be acquired by the said contractor in all respects as such property may be acquired by the said board of rapid transit railroad commissioners for the said city, and all proceedings to acquire the said property shall be conducted under the direction and subject to the approval of the rapid transit railroad commissioners. It shall be the duty of the board whenever any property which the city shall have acquired as provided in this act shall be unnecessary for rapid transit purposes, to sell and convey the same in behalf of said city, provided, however, that no such sale or conveyance shall be made except with the approval of the commissioners of the sinking fund of such city, or if there be no commissioners of the sinking fund then the other board or public body thereof having power to sell or lease city property and provided further that the proceeds of any such sale or conveyance shall, under the direction of the said board of rapid transit railroad commissioners, be applied either to the purchase of other property necessary for rapid transit purposes or shall be applied in all respects as the payments of rental to be made by the contractor as provided in this act. Whenever the said rapid transit railroad commissioners for and in behalf of the city shall have acquired or shall hereafter acquire an easement in property by conveyance of grant for the purpose of the operation or construction of a rapid transit railroad, it may in behalf of the city and as part consideration for the grant or conveyance of the easement, enter into an agreement with the grantor of such easement or right of way, giving to such grantor or his assigns, the right of lateral or other support through, in, or under the said property, or any adjoining lands or space occupied by said rapid transit railroad for any building erected or to be erected upon the land over which the easement or right of way has been obtained for the support and maintenance of any such building or buildings, provided that any structure that shall be built for the support of any such building or buildings shall be approved by said board and shall not extend in or under any street beyond the curb lines as fixed by the ordinances of the board of aldermen or other legislative body of such city. (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by L.* 1895, *ch.* 519, § 15, *L.* 1896, *ch.* 729, § 5, *L.* 1901, *ch.* 587, *L.* 1904, *ch.* 564, § 5, *and L.* 1906, *ch.* 472, § 10.)

§ 40. It shall and may be lawful for said board, and for all persons acting under its authority, to enter in the daytime into and upon any and all lands and property which it shall deem necessary to be acquired, or to which there may be appurtenant rights, terms, franchises, easements or privileges which it shall deem necessary to be acquired or extinguished by said city, for the purpose of making the maps or surveys hereinafter mentioned, and also to enter in like manner and for the same purpose upon any property adjacent to and within five hundred feet of the property to be so surveyed; and the said board shall cause three similar maps or plans to be made of each parcel of property which it may deem necessary so to be acquired, or to which there may be appurtenant rights, terms, franchises, easements or privileges neces-

sary so to be acquired or extinguished, designating each of said parcels by a number, and upon each map or plan so made or in a memorandum accompanying the same and to be deemed part thereof the said board shall cause to be clearly indicated the particular estate or estates, rights, terms, privileges, franchises or easements to be acquired or extinguished for the purposes of this act, in relation to each and every piece or parcel of property described upon said map or plan. The said board shall have power to cause a triplicate set of maps or plans and memoranda as herein provided for to be made as often and at such times as said board shall determine, and each set of maps or plans and memoranda so made shall contain the particulars above enumerated within such district as said board shall in each case provide. The maps or plans and memoranda herein provided for, when approved and adopted by said board, shall have written thereon a certificate of such approval, signed by the members of said board adopting and approving the same, and one copy thereof shall be filed in the department of public works, or other chief executive department having principal charge of the streets, there to remain as a public record, and the other two of said maps or plans and memoranda shall be transmitted to the counsel to the corporation or other principal legal adviser of said city. The said board may from time to time make and file further maps or plans and memoranda amending those already filed, but not so as to defeat or impair any property or interest which shall have been already acquired, or to revive any interest or right which may have been already extinguished by the said city. (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by L.* 1895, *ch.* 519, § 16.)

§ 41. Whenever and as often as the said board shall deem it to be necessary and proper that the said city should acquire any such property and shall have caused to be made, as provided in the last preceding sections, the maps or plans and memoranda specifying and defining the said property to be acquired, or to which are appurtenant the rights, terms, franchises, easements or privileges to be acquired or extinguished, and shall have certified, filed and transmitted the several copies of such maps or plans as in the last section prescribed, the said board may direct the counsel to the corporation or other principal legal adviser of said city, to take legal proceedings to acquire the same for the said city, and the said counsel to the corporation or other principal legal adviser, shall thereupon take proceedings as in this act provided. (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by L.* 1895, *ch.* 519, § 17.)

§ 42. The said counsel to the corporation, or other principal legal adviser of said city, shall cause one of the maps or plans, so as aforesaid transmitted to him, to be filed in the office of the register of the county, or if there be no such register, then in the office of the county clerk of the county in which said city is situated. The map, hereinafter denominated the third map, being the other one of the two so as aforesaid transmitted to said counsel to the corporation, or other legal adviser, shall be disposed of as hereinafter provided. (*New section, Laws* 1894, *ch.* 752, § 9.)

§ 43. After the said set shall have been filed as hereinbefore provided in the office of the register or county clerk of said county, the said counsel to the corporation, or other principal legal adviser, for and on behalf of the said city, shall, and he may from time to time, upon first giving the notice

required by the next section of this act, apply to the supreme court at any special or general term thereof, to be held in the judicial district in which said city is situated, for the appointment of commissioners of appraisal. Upon each such application he shall present to the court a petition, signed by a majority of the members of said board and verified in the manner prescribed by law for the verification of pleadings, according to the practice of said court, setting forth the action or determination theretofore taken or had by said board, with respect to the property to be acquired, and the filing of said maps or plans and memoranda and praying for the appointment of such commissioners of appraisal. Such petition shall contain a general description of all the property to, or in or over or appurtenant to which any title, interest, right, franchise, easement, term or privilege is sought to be acquired or extinguished, and of every right, franchise, easement, or privilege sought to be acquired, by the said city for public purposes, each lot or parcel being more particularly described by a reference to the number of said lot or parcel as given on said maps, and the title, interest, right, easement, term or privilege sought to be acquired, or extinguished, to or in or over or appurtenant to each of said lots or parcels shall be stated in said petition. (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by L.* 1895, *ch.* 519, § 18.)

§ 44. The said counsel to the corporation, or other principal legal adviser, shall give or cause to be given notice by publication in two public newspapers published in the said city, or, instead of such publication, may in his discretion cause service of the petition and notice of his intention to make application to the said court for the appointment of such commissioners of appraisal, to be made in the same manner prescribed by section three thousand three hundred and sixty-two of the code of civil procedure, as amended by chapter ninety-five of the laws of eighteen hundred and ninety, such notice if published as aforesaid shall state the time and place of such application, shall briefly state the object of the application, and shall briefly describe the property sought to be acquired or affected, and refer to a fuller statement to be filed in the office of the board of rapid transit railroad commissioners, in which shall be set forth the location and boundaries of the several lots or parcels of property, and rights, franchises, easements or privileges sought to be taken or affected, and a brief statement as to each of said lots or parcels, of the title, interest, rights, easements, terms or privileges therein or appurtenant thereto sought to be acquired or extinguished, with a reference to the dates and places of filing the said maps or plans and memoranda shall be a sufficient description of the property sought to be so taken or affected. Such notice in case of publication as aforesaid shall be so published, in said newspapers twice a week for six weeks immediately previous to the time fixed in said notice for the presentation of each petition. (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by L.* 1895, *ch.* 519, § 19 *and L.* 1902, *ch.* 533.)

§ 45. At the time and place mentioned in said notice, unless the said court shall adjourn said application to a subsequent date, and in that event at the time to which the same may be adjourned, the court, upon due proof to its satisfaction of the publication aforesaid, and upon filing the said petition, shall make an order for the appointment of three disinterested freeholders, residents in said city, as commissioners of appraisal, to ascertain

and appraise the compensation to be made to the owners of property so to be taken or extinguished for the purposes indicated in this act. Such order shall fix the time and place for the first meeting of the commissioners. (*New section, Laws* 1894, *ch.* 752, § 9.)

§ 46. The said commissioners shall take and subscribe the oath required by the twelfth article of the constitution of the state of New York, and shall forthwith file the same in the office of the clerk of the county in which said city is situated. (*New section, Laws* 1894, *ch.* 752, § 9.)

§ 47. On filing said oath in the manner provided in the last section, the said city shall be and become seized and possessed in fee or absolute ownership of all those parcels of property, rights, terms, franchises, easements and privileges which are in the maps or plans and memoranda referred to in section forty of this act, described as parcels of property, rights, franchises, easements, or privileges which are to be acquired, and also shall become seized and possessed of all the rights, terms, franchises, easements or privileges appurtenant to any lots or parcels of property indicated on said maps or plans as parcels in regard to which it is deemed necessary to acquire such rights, terms, franchises, easements or privileges, or the said rights, terms, franchises, easements or privileges shall be extinguished as the case may be; and the said board for the said city, may immediately or at any time or times thereafter take possession or enter into the enjoyment of the said property, rights, terms, franchises, easements and privileges or of any part or parts thereof without any suit or proceeding at law for that purpose and the said board for the said city, or any person or persons acting under their or its authority, may enter upon and use, occupy, and enjoy in perpetuity all the parcels of property and all the rights, terms, franchises, easements or privileges appurtenant to any of the parcels of property and all rights, franchises, easements, and privileges, described on said maps or plans or in said memoranda, for any of the purposes authorized and provided for by this act. But on such filing of the said oath the said city shall be and become forthwith liable to the respective owners of the several parcels of property and the several rights, terms, franchises, easements and privileges appertaining thereto, and of the said rights, franchises, easements, and privileges acquired as aforesaid, for the true and respective values thereof, together with interest thereon from the time of filing the said oath, provided, however, that no such interest shall be payable to any owner of any such property, right, term, franchise, easement or privilege during any period during which the said city or the said board of rapid transit railroad commissioners may by any resistance, whether by legal proceedings or otherwise of such owner or with his authority, be prevented from taking possession thereof or enjoying the same; and provided further, that no action shall be brought to recover the amount of such value or interest unless within eighteen months after the filing of such oath, a report shall not have been duly made by commissioners of appraisal as herein provided, or such report shall not have been confirmed by the supreme court as herein provided, so that the said city shall be liable to forthwith pay the amount by such report ascertained to be due for such value or interest. (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by L.* 1895, *ch.* 519, § 20.)

§ 48. Any one of said commissioners of appraisal may issue subpoenas

and administer oaths to witnesses, and they or any one of them, in the absence of the others, may adjourn the proceedings, from time to time in their discretion, but they shall continue to meet from time to time as may be necessary to hear, consider and determine upon all claims which may be presented to them under any of the provisions of this act. In case of the death, resignation, refusal or neglect to serve of any commissioner of appraisal, the remaining commissioner or commissioners shall, upon ten days' notice, to be given by advertisement in the newspapers mentioned in section forty-four of this act, apply to the supreme court, at a special or general term thereof, to be held in the judicial district in which said city is situated, for the appointment of a commissioner or commissioners to fill the vacancy or vacancies so occasioned. In case of the death, resignation or refusal to serve of all the commissioners of appraisal, the said counsel to the corporation or other principal legal adviser to said city shall, on giving the notice required in this section, apply to the said court for the appointment of other commissioners of appraisal. It shall be the duty of the commissioners of appraisal to procure from the counsel to the corporation or other principal legal adviser the third set of maps or plans and memoranda provided for in sections forty and forty-two of this act. They shall view the property laid down on said maps, and shall hear the proofs and allegations of any owner, lessee or other person in any way entitled to or interested in the property to be acquired or extinguished, or any part or parcel thereof, and also such proofs and allegations as may be offered on behalf of the said city. They shall reduce the testimony, if any, taken before them to writing, and after the testimony is closed, they, or a majority of them, all having considered the same, and having an opportunity to be present, shall, without unnecessary delay, ascertain and determine the compensation which ought justly to be made by the said city to the owners or persons interested in the property acquired or extinguished by said proceedings. The said commissioners of appraisal shall make reports of their proceedings to the supreme court, as in the next section provided with the minutes of the testimony taken before them, if any, and they shall be entitled to the payment hereinafter provided for their services and expenses, to be paid from the fund hereinafter specified. The said commissioners may make a single report or may make reports from time to time as they shall reach their several decisions as to different parcels of property. (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by L.* 1895, *ch.* 519, § 21.)

§ 49. The said commissioners shall prepare a report or reports, to which shall be annexed the third set of maps or plans and memoranda referred to in section forty-two of this act and therein denominated the third set or a copy thereof certified by them. Each said report shall contain a brief description of the property so taken or affected, with a reference to the map upon which the same is required to be indicated; a statement of the sums estimated and determined upon by them, as a just compensation for the same to be made by the city to the owners or persons interested therein and the names of such owners and persons; but in all and each and every case or cases where one or more of the owners and persons interested, or their respective estates or interests, are unknown, or not fully known, to the commissioners of appraisal, it shall be sufficient for them to set forth and

state in general terms the respective sums to be allowed and paid to the owners of and persons interested therein generally, without specifying the names or estates or interests of such owner or persons interested, or any or either of them. (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by L.* 1895, *ch.* 519, § 22.)

§ 50. Each said report, signed by said commissioners, or a majority of them, shall be filed in the office of the clerk of the county in which said city is situated, and the commissioners of appraisal shall, in each case, notify the counsel to the corporation, or other principal adviser to said city, as soon as any such report is filed. (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by L.* 1895, *ch.* 519, § 23.)

§ 51. The counsel to the corporation, or other principal legal adviser, or, in case of his neglect to do so within ten days after receiving notice of such filing, then any person interested in the proceedings, shall give notice that the said report will be presented for confirmation to the supreme court, at a special term thereof, to be held in the judicial district in which said city is situated, at a time and place to be specified in said notice. The said notice shall contain a statement of the time and place of the filing of the report, and shall be published in two daily newspapers published in such city, for at least two weeks immediately prior to the presentation of said report for confirmation. (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by* L. 1895, *ch.* 519, § 24.)

§ 52. The application for the confirmation of each such report shall be made to the supreme court at a special term thereof, held in the judicial district in which said city is situated. Upon the hearing of the application for the confirmation thereof, the said court shall confirm such report and make an order containing a recital of the substance of the proceedings in the matter of the appraisal, with a general description of the property appraised and for which compensation is to be made, and shall also direct to whom the money is to be paid, and whether or not any part thereof, and, if so, what part, is to be deposited with the comptroller or other chief financial officer of said city with the chamberlain of said city, or if there be no chamberlain, with a bank or trust company to be designated by said court. Such report when so confirmed shall except in the case of an appeal, as hereinafter provided, be final and conclusive, as well upon the said city as upon owners and all persons interested in or entitled to said property, and also upon all other persons whomsoever. (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by L.* 1895, *ch.* 519, § 25.)

§ 53. The said city shall, within four calendar months after the confirmation of any report of the commissioners of appraisal, pay to the respective owners and bodies politic or corporate mentioned or referred to in said report, in whose favor any sum or sums of money shall be estimated and reported by said commissioners, the respective sum or sums so estimated and reported in their favor respectively, with legal interest thereon from the date of filing the oath of said commissioners, and in case of neglect or default in the payment of the same within the time aforesaid, the respective person or persons or bodies politic or corporate, in whose favor the same shall be so reported, his, her or their executors, administrators, successors or assigns at any time or times after the application first made by him, her or them.

to the comptroller or other chief financial officer of said city for payment thereof, may sue for and recover the same, with lawful interest as aforesaid, and the costs of suit, in any proper form of action against the said city in any court having cognizance thereof, and in which it shall be sufficient to declare generally for so much money due to the plaintiff or plaintiffs therein by virtue of this act for property taken or extinguished for the purposes herein mentioned, and the report of said commissioners, with proof of the right and title of the plaintiff or plaintiffs to the sum or sums demanded shall be conclusive evidence in such suit or action. (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by L.* 1895, *ch.* 519, § 26.)

§ 54. Whenever the owner or owners, person or persons interested in any property taken or affected in such proceeding, or in whose favor any such sum or sums or compensation shall be so reported, shall be under the age of twenty-one years, or of unsound mind or absent from the city, and also in all cases where the name or names of the owner or owners, person or persons, interested in any such property shall not be set forth or mentioned in said report, or where the said owner or owners, person or persons, being named therein, can not, upon diligent inquiry, be found, or where there are adverse or conflicting claims to the money awarded as compensation, it shall be lawful for the said city to pay the sum or sums mentioned in said report, payable, or that would be coming to such owner or owners, person or persons, respectively, with interest, as aforesaid, to the chamberlain of said city, or if there be no chamberlain, then to any bank or trust company designated by the court in the order confirming the report of the commissioners of appraisal, to the credit of such owner or owners, person or persons, and such payment shall be as valid and effectual in all respects as if made to the said owner or owners, person or persons, interested therein, respectively, according to their just rights; and, provided, also, that in all and each and every such case and cases where any sum or sums or compensation reported by the commissioners in favor of any person or persons or parties whatsoever, whether named or not named in said report, shall be paid to any person or persons, or party or parties, whomsoever, when the same shall of right belong and ought to have been paid to some other person or persons, or party or parties, it shall be lawful for the person or persons, or party or parties, to whom the same ought to have been paid, to sue for and recover the same, with lawful interest and costs of suit, as so much money had and received to his, her or their use by the person or persons, party or parties, respectively, to whom the same shall have been so paid. (*New section, Laws* 1894, *ch.* 752, § 9.)

§ 55. Every owner or person in any way interested in any property taken or extinguished as contemplated in this act, if he intends to make claim for compensation for such taking or extinguishment, shall within six months after the appointment of the commissioners of appraisal exhibit to the said commissioners a statement of his claim, and shall thereupon be entitled to offer testimony and to be heard before them touching such claim and the compensation proper to be made to him, and to have a determination made by such commissioners of appraisal as to the amount of such compensation. Every person neglecting or refusing to present such claim within said time shall be deemed to have surrendered his claim for such compensation, except so far

as he may be entitled, as such owner or person interested, to the whole or a part of the sum of money awarded by the commissioners of appraisal as a just compensation for taking or extinguishing the property owned by said person, or in which the said person is interested. (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by L.* 1901, *ch.* 587.)

§ 56. Payment of the compensation awarded by said commissioners of appraisal to the persons named in their report (if not infants or persons of unsound mind), shall in the absence of notice to the said city of other claimants to such award, protect the said city. (*New section, Laws* 1894, *ch.* 752, § 9.)

§ 57. Said commissioners of appraisal may in their discretion take up any specified claim or claims, and finally ascertain and determine the compensation to be made thereon, and make a separate report with reference thereto, annexing to said report a copy of so much of the set of maps or plans and memoranda referred to in section forty-two of this act as indicates the property so reported on. Such report shall, as to claims therein specified, be the report required in this act, and the subsequent action with reference thereto, shall be had in the same manner as though no other claim were embraced in said proceeding, which, however, shall continue as to all claims upon which no such determination and report is made. (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by L.* 1895, *ch.* 519, § 27.)

§ 58. Within twenty days after notice of the confirmation of the report of the commissioners, as provided for in section fifty-two of this act, which notice may, as to parties who have not appeared before the commissioners, be given in the manner provided in section fifty-one of this act, either party may appeal to the general term of the supreme court in the department in which such commissioners were appointed, from the appraisal and report of the commissioners and the order confirming the same. Such appeal shall be heard upon due notice thereof being given, according to the rules and practice of said court. On the hearing of such appeal the court may direct a new appraisal and determination of any question passed upon, by the same or new commissioners, in its discretion, and from any determination of the general term either party, if aggrieved, may take an appeal, which shall be heard and determined by the court of appeals. In the case of a new appraisal the second report shall be final and conclusive on all the parties and persons interested. If the amount of compensation to be made by such city is increased by the second report, the difference shall be paid by the comptroller or other chief financial officer of said city, to the parties entitled to the same, or shall be deposited with the chamberlain, or bank or trust company, as the court may direct, and if the amount is diminished the difference shall be refunded to the said city by the party to whom the same may have been paid, and judgment therefor may be rendered by the court on the filing of the second report against the party liable to pay the same. But the taking of an appeal by any person or persons shall not operate to stay the proceedings under this act except as to the particular property with which the said appeal is concerned. Such appeal shall be heard upon the evidence taken before said commissioners, and any affidavits as to irregularities, and three printed copies of such evidence shall be furnished by the said city to the party taking the appeal, within ten days after the

appeal is perfected, and such appeal may be heard on the evidence so furnished, and may be taken without security thereon. (*New section, Laws* 1894, *ch.* 752, § 9.)

§ 59. The supreme court in the judicial district in which said city is situated shall have power at any time to amend any defect or informality in any of the special proceedings authorized by this act as may be necessary, and to direct such further notices to be given to any party in interest as it deems proper, and also to appoint other commissioners in place of any who shall die, or refuse, or neglect to serve or be incapable of serving, or be removed. And the said court may at any time remove any commissioner of appraisal who in its judgment shall be incapable of serving, or who shall for any reason in its judgment be an unfit person to serve as such commissioner. The cause of such removal shall be specified in the order making the same. If in any particular it shall at any time be found necessary to amend any pleading or proceeding or to supply any defect therein arising in the course of any special proceeding authorized by this act, the same may be amended or supplied in such manner as shall be directed by the supreme court, which is hereby authorized to make such amendment or correction. Wherever in this act reference is made to the general term of the supreme court, it shall be deemed to include the appellate division of the supreme court for the district in which said city is situated, whenever said general term shall be superseded thereby. (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by L.* 1895, *ch.* 519, § 28.)

§ 60. All property acquired under the provisions of this act shall be and shall be deemed to have been acquired for public uses and purposes, and for the purpose of affording increased facilities for rapid transit between points within the city acquiring such property. (*New section, Laws* 1894, *ch.* 752, § 9.)

§ 61. The moneys necessary and sufficient to be paid for any property acquired in any manner under the provisions of this act, together with all expenses necessarily incurred in surveying, locating, and acquiring title to such property, and for surveying and locating the same, and for preparing the necessary maps and plans in connection therewith, shall be raised and paid out of the proceeds of bonds issued and sold as provided by section thirty-seven of this act, and all such expenses so incurred in surveying, locating and acquiring title, and for preparing necessary maps and plans and also those incurred as provided in the next section shall be deemed a part of and included in the cost of constructing the road or roads, the construction of which rendered it necesseary to acquire the property in the course of the acquisition of which such expenses may be incurred. (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by L.* 1895, *ch.* 519, § 29.)

§ 62. The commissioners of appraisal appointed in pursuance of this act shall receive as compensation the sum of ten dollars per day for each day actually employed. They may employ the necessary clerks, stenographers and surveyors. The counsel to the corporation or other principal legal adviser to said city shall, either in person or by such counsel as he shall designate for the purpose, appear for and protect the interests of the city in all such proceedings in court and before the commissioners. The fees of the commissioners and the salaries and compensation of their employees, and all

other necessary expenses in and about the said proceedings provided for by this act, and such allowance for counsel fees as may be made by order of the court, and all reasonable expenses incurred by said counsel to the corporation, or other principal legal adviser of said counsel designated by him for the proper presentation and defense of the interests of said city before said commissioners and in court, shall be paid by the comptroller or other chief financial officer of said city out of the funds referred to in the last preceding section. But such fees and expenses shall not be paid until they have been taxed before a justice of the supreme court in the judicial district in which said city is situated upon five days' notice to the counsel to the corporation, or other chief legal adviser of said city. Such allowance shall, in no case, exceed the limits prescribed by section thirty-two hundred and fifty-three of the code of civil procedure. (*New section, Laws* 1894, *ch.* 752, § 9.)

§ 63. In case it shall be determined by vote of the people as provided by sections twelve and thirteen of chapter seven hundred and fifty-two of the laws of eighteen hundred and ninety-four to construct by and at the city's expense, then and in that event the road or roads so constructed shall be and remain the absolute property of the city so constructing it or them, and shall be and be deemed to be a part of the public streets and highways of said city, to be used and enjoyed by the public upon the payment of such fares and tolls, and subject to such reasonable rules and regulations as may be imposed and provided for by the board of rapid transit railroad commissioners in said city. (*New section, Laws* 1894, *ch.* 752, § 9, *as amended by L.* 1895, *ch.* 519, § 30.)

§ 64. This act shall not be construed to repeal or in any manner affect chapter six hundred and six of the laws of eighteen hundred and seventy-five, entitled "An act to further provide for the construction and operation of a steam railway or railways in the counties of this state," or the acts amendatory thereof or supplementary thereto, or article five of chapter five hundred and sixty-five of the laws of eighteen hundred and ninety, known as the railroad law, except so far as the said acts, or either of them, would, if this act had not been passed, authorize the appointment hereafter of any commissioners applied for as provided in section one of said act of eighteen hundred and seventy-five, or in section one hundred and twenty of said act of eighteen hundred and ninety, in any city or cities containing a population of over one million inhabitants, according to the last preceding national or state census, or authorize any commissioners already appointed pursuant to the provisions of such act or acts in any such city or cities, to fix, determine or locate any new route or routes, pursuant to the provisions of either of said acts. This act shall not be construed in any manner to effect the exercise or enjoyment at any time, and from time to time hereafter, of any right or rights heretofore acquired, exercised or enjoyed by any corporation heretofore duly incorporated and organized or deriving powers and rights under the laws of this state. This act shall not affect or impair the exercise or enjoyment of any right or rights now possessed or heretofore acquired or heretofore authorized to be acquired, exercised or enjoyed by any street surface railroad corporation, except as herein otherwise expressly provided, and this act shall not be construed to repeal or in

any manner affect chapter one hundred and forty of the laws of eighteen hundred and fifty, entitled "An act to authorize the formation of railroad corporations, and to regulate the same," or either of the several acts amendatory thereof or supplementary thereto. This act shall not be construed to repeal or in any manner affect chapter five hundred and sixty-five of the laws of eighteen hundred and ninety, known as the railroad law, except as hereinabove expressly provided, or except so far as the provisions of the same conflict with the provisions of this act. But nothing in this section contained shall prevent the board of rapid transit railroad commissioners from laying out a route for a railway and constructing and operating a railway, and such board shall have the right to lay out such route and construct and operate such railway, over, under, along or across any street in, along, under or over which there shall be any existing railway, provided that the routes so laid out by the said board and the railway so constructed by it shall so pass over or under or at the side of such existing railway as not to interfere with its operation. (*Laws* 1891, *ch.* 4, § 34, *as amended by L.* 1894, *ch.* 752, § 9, *L.* 1895, *ch.* 519, § 31, *and L.* 1906, *ch.* 472, § 11.)

§ 65. All acts and parts of acts local or general inconsistent with this act are hereby repealed. (*Laws* 1891, *ch.* 4, § 36, *as amended by L.* 1894, *ch.* 752, § 9, *and L.* 1906, *ch.* 472, § 12.)*

§ 66. This act shall take effect immediately. (*Laws* 1891, *ch.* 4, § 37, *as amended by L.* 1894, *ch.* 752, § 9, *and L.* 1906, *ch.* 472, § 12.)*

NOTE.— The following sections of the Act of 1894 (Chapter 752), do not, *in terms*, amend any portion of the Rapid Transit Act of 1891, although the whole Act of 1894 is, in fact, an amendment of the earlier statute. These sections are accordingly numbered with respect to their position in the Act of 1894, and without reference to the numbering of the sections in the original act.

§ 11. The commissioners of rapid transit heretofore appointed under the act hereby amended, or who became such commissioners by its terms, upon the organization of the board which shall succeed them pursuant to said act as hereby amended, shall cease to be such commissioners and shall transfer and deliver to the board of rapid transit railroad commissioners, provided for by the act hereby amended, as so amended, all furniture, books, maps, records, plans and other papers and property of what kind soever appertaining or belonging to or in the custody of the board of which they were commissioners, or in their possession, or under their control as such commissioners, or held by them, or for which they are responsible in their official capacity. The expenses incurred by said commissioners for which an appropriation or appropriations shall have been made pursuant to section ten of the act hereby amended, shall be paid upon vouchers to be furnished by said commissioners and otherwise, as provided in said section. Said com-

* These sections were renumbered by the amendment of 1906, which was made necessary by the repeal of the former section 65 of the Rapid Transit Act. The section so repealed prohibited the construction of surface roads in the city streets, under the provisions or authority of this act, except where necessary for connections with bridges, etc.

Section 14, of chap. 472, Laws of 1906, which took effect May 16, 1906, provides that nothing in this act contained shall repeal, modify or alter any provision of the act hereby amended in respect of any railway or railways constructed, constructing or contracted for thereunder when this act takes effect; but the act hereby amended shall be and continue in full force and effect in respect of such railway or railways so constructed, constructing, or contracted for, as if this act had not been passed."

missioners shall also be entitled to receive a reasonable compensation for the services which have been rendered by them, which may have been, or which shall be, determined on their application in the manner provided for in said section. The comptroller, or other chief financial officer of said city, is hereby authorized and directed to issue and sell revenue bonds of such city in anticipation of the receipt of taxes, and out of the proceeds of such bonds to pay said compensation so ascertained and determined, and the amount necessary to pay the principal and interest of said bonds shall be included in the tax levy of said city for the year next following the issue and sale of the same. (*New section, Laws* 1894, *ch.* 752, § 11.)

§ 12. The said board of rapid transit railway commissioners shall cause the question, whether such railway or railways shall be constructed by the city and at the public expense, to be submitted to the vote of the qualified electors of the city within which such railway or railways is or are to be constructed, and to that end it shall be the duty of the said board, after completion of the detailed plans and specifications, as required by the act hereby amended, at least thirty days prior to the next general election. to file with the public officer or officers within the county in which such city is located, who may be charged with the duty of printing the ballots to be used at such election, a request that separate ballots be printed and supplied to such electors, one-half in number of which shall read: "For municipal construction of rapid transit road," and the other half in number of said ballots shall read, "Against municipal construction of rapid transit road." Upon such request being so filed, such ballots shall be printed and supplied to such electors at such general election, and separate ballot boxes shall be provided for the reception of the same in each election district within such city, and the provisions of chapter six hundred and eighty of the laws of eighteen hundred and ninety-two, entitled "An act in relation to the elections constituting chapter six of the general laws," and any act or acts amendatory thereof or supplemental thereto shall apply thereto as far as the nature of the case may allow. No ballot which may be provided under this section shall be deemed invalid by reason of any error in dimensions, style of printing, or other formal defect, or through having been deposited in the wrong ballot box, but all of such ballots shall be canvassed and returned as if such formal defect had not existed, or as if they had been deposited in the box provided for the purpose. Upon the canvass of such votes by the board of county canvassers of the county in which such city is located, it shall be the duty of said board to file with the county clerk of said county a statement which shall declare the total number of votes cast in said city "for municipal construction of rapid transit road," and the total number so cast therein "against municipal construction of rapid transit road." And the said railway or railways shall be constructed by the said city and at the public expense, if it shall be found from such statements so filed that there is a majority of the votes so cast in favor of such municipal construction. (*New section, Laws* 1894, *ch.* 752, § 12.)

§ 13. In case the majority of votes cast at such election shall be in favor of such municipal construction of said railway or railways, it shall be the duty of said board of rapid transit railway commissioners, within thirty days after the official declaration of the said vote, to proceed to

construct the said railway or railways, and to make and let all contracts required for the performance of the work necessary to be done and performed in and about the construction thereof. All such contracts must, before execution, be approved as to form by the counsel to the corporation, or other chief legal adviser for said city. (*New section, Laws* 1894, *ch.* 752, § 13.)

§ 14. This act shall take effect immediately; except that the building of said road, or the sale of the franchises as provided for in sections seven and thirty-four of the act hereby amended, as so amended, is postponed until, and made dependent upon, the determination of that question by the vote of the people as called for by sections twelve and thirteen of this act. (*New section, Laws* 1894, *ch.* 752, § 14.)

LAWS 1906, CHAP. 109.

AN ACT to terminate the use of streets, avenues and public places in the city of New York, in the borough of Manhattan, by railroads operated by steam locomotive power at grade.

Became a law, March 26, 1906, with the approval of the Governor. Passed, three-fifths being present. Accepted by the city.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. The board of rapid transit commissioners in and for cities having over one million inhabitants is hereby empowered and directed as speedily as possible to prepare a plan for the removal of the tracks of railways now operated by steam locomotive power, laid on, across, through or along the public streets, avenues, or public parks or places of the city of New York, in the borough of Manhattan, at grade; and to terminate the operation thereon of any railway by steam locomotive power; and to take such action in that regard as herein provided. In carrying out the duties imposed by this act, said board of rapid transit commissioners and their various officers and agents shall have and enjoy all the powers now conferred on them by chapter four of the laws of eighteen hundred and ninety-one and also amendments thereto now in force, so far as the same may be applicable to the purpose of this act, together with all the powers which any board, commissioner or public officer now has to regulate the manner of exercise on, across, through or along such streets, avenues, or public parks or places of any public franchise heretofore granted to any such steam railway company, including the right to regulate or require changes to be made for the public convenience or benefit in the use of such streets, avenues, public parks or places by such railroad company, and all other powers in that regard expressed or implied in any such franchise granted to any such railway company so operated to operate a railroad on, across, through or along avenues, streets, or public parks or places of the borough of Manhattan.

§ 2. The said board of rapid transit commissioners is hereby empowered

and instructed to prepare a plan and make an agreement with any railroad company or companies now so operating a railroad by steam locomotive power in the borough of Manhattan, in the city of New York, which railroad is now operated at grade as aforesaid in said borough, said plan and agreement to provide in detail for the construction by the railroad company or companies at its or their own cost of a subway under the roadbed of the present tracks or under such other street or streets, avenues or public or private property as may be agreed upon, to which said tracks shall be removed and on which shall be operated, subject to the regulation of the board of rapid transit commissioners, a freight, passenger or freight and passenger railway business under a franchise, the terms and duration whereof shall be in such agreement fixed and determined, and such plan and agreement further to provide that as a condition of said agreement and as a part of the consideration therefor, all present franchises of every kind on, across, through and along such streets, avenues and public parks and places where said railroad is so operated by such steam locomotive power at grade shall be surrendered and canceled and the tracks thereof shall at the cost of the railroad company or companies be removed therefrom and that the right and franchise to operate said railroad thereon shall cease. The board of rapid transit commissioners may grant to said company or companies an additional franchise to lay in said subway such additional tracks as may be agreed upon and to operate thereon a freight, passenger or freight and passenger business, under such terms and for such compensation as shall be fixed by said board in said grant. It shall be further stipulated in said agreement that the consent of the board of rapid transit commissioners shall be obtained and proper compensation be fixed by said board as a condition to said company or companies making any connection or connections between said subway and other subways, to be owned or occupied by said company or companies or by any other company or companies.

§ 3. The board of rapid transit commissioners may further provide in said plan for the construction of such pipe galleries in, along and through said subway as they may deem necessary for the public use; and provide for the expense of constructing the same to be borne by the city of New York, said pipe galleries to be and remain the property of the city of New York. If the board of estimate and apportionment shall provide for the construction of pipe galleries to contain sewers, pipes or other subsurface structures, the said galleries shall be maintained by the city of New York and shall be in the care and charge of the said board and subject to such regulations as it shall prescribe not inconsistent with the provisions of this act, and any revenue derived therefrom shall be paid into the treasury of said city. Provided, however, that any person or corporation who or which, at the time of the construction of the said galleries, shall own pipes, subways or conduits in a street, avenue or public place in which said galleries shall be constructed pursuant to this act shall be entitled to the use of such galleries for his or its said pipes, subways or conduits in the same manner as the said person or corporation shall be entitled by law to the use of such street, avenue or public place, and that no rent shall be charged for such use, except a reasonable charge to defray the actual cost of maintenance, unless such pipes, subways or conduits shall be of a greater capacity than those

theretofore owned by such person or corporation in said street, avenue or public place, and that, if the capacity of any such pipe, subway or conduit so placed in the said galleries shall be increased, the rent shall be charged only for such increased capacity; and provided, further, that the placing in any such galleries of the subways or conduits of any corporation owning subways or conduits for electrical conductors, shall not in any wise affect the right of such corporation to charge and demand such compensation or rent for the use of said subways or conduits by other corporations or individuals as is, or may be, permitted by law. Whenever the construction of any railway, depressed way, subway or tunnel under the provisions of this act shall interfere with, disturb or endanger any sewer, water pipe, gas pipe, or other duly authorized subsurface structures, the work of construction at such points shall be conducted in accordance with the reasonable requirements and under the supervision of the officer or local authority having the care of and the jurisdiction or control over such subsurface structures so interfered with, disturbed or endangered. All expenses incidental to such supervision and to the work of reconstructing, readjusting and supporting any such sewer, water pipe, gas pipe or other duly authorized subsurface structure shall be borne and paid by the railroad company or companies now operating such railroad by steam locomotive power. Said plan shall provide further, the time within which such work shall be done which shall be under the supervision and the control of the board of rapid transit commissioners. The board of rapid transit commissioners shall prepare such plan, and the maps and drawings necessary thereto as speedily as possible. No agreement for the changes proposed by this act or for the plan herein provided for, shall be binding or take effect until the contract, the said plan and the maps in connection therewith, prepared by and under the direction of the board of rapid transit commissioners, shall have been submitted to the board of estimate and apportionment of the city of New York and shall have been approved by said board. Upon said approval, the said contract may be executed by the board of rapid transit commissioners and said railroad company or companies and shall thereupon be binding upon the city of New York, upon said board of rapid transit commissioners and upon said railroad company or companies. After said contract shall have gone into effect, the enforcement thereof and of the several provisions therein contained shall be a part of the duties of said board of rapid transit commissioners, which shall in its own name take such proceedings in law or in equity as may be from time to time necessary to enforce the same.

§ 4. In case the board of rapid transit commissioners shall be unable within twelve months after this act takes effect* to agree as herein provided with such railroad company upon a plan as contained in the preceding section and obtain the approval thereof of the board of estimate and apportionment, the said board of rapid transit commissioners shall thereupon condemn all and any rights, privileges and franchises of any such railway company or companies to operate by locomotives using steam or other power cars or trains for carrying freight and passengers at grade on, across, through or along streets, avenues, public parks or places of the city of New York,

* This act became a law March 26, 1906, with the approval of the Governor and by Section 9 below, it took effect immediately.

borough of Manhattan, and cause the tracks of such railroad or railroads to be removed therefrom. It shall cause to be prepared three similar maps or plans showing the streets, avenues, public parks and places on which any such railroad company now operates or has any franchise or right to operate such steam railway at grade in said city and borough and showing the location thereon of the tracks, if any, of such railway whose tracks or appurtenances or whose right to conduct such railway are to be so condemned as herein provided. Such maps or plans when adopted and approved by said board shall be disposed of in like manner as maps or plans of property to be condemned under the provisions of chapter four of the laws of eighteen hundred and ninety-one as amended; and the provisions of said chapter relative to the condemnation of property for public use, so far as the same may be applicable and not in conflict with the provisions of this act, shall apply to the proceedings to be had hereunder. Said board shall after the filing of said maps or plans direct the counsel to the corporation of the city of New York to take legal proceedings to acquire by condemnation all such valid or lawful franchises of any such company operating such railway in said city, and the tracks and appurtenances thereof in such public streets, avenues, public parks or places as shown in said map or plans. Said counsel to the corporation shall thereupon cause to be served on the president or other officer upon whom a summons against such corporation might be served in an action of the railway corporation or corporations whose franchise or right to operate such railway or railways is to be condemned, or whose tracks or property is to be affected by such proceeding, ten days prior to the date on which the same is made returnable, notice of an application for the appointment of commissioners for the condemnation of such franchise or franchises and of such tracks or appurtenances thereto, and shall accompany such notice with a copy of a petition signed by a majority of the members of said board and verified in the manner prescribed by law for the verification of pleadings, setting forth the action or determination theretofore taken or had by said board in respect to the franchises, rights, privileges or property to be acquired, and the filing of said maps or plans and praying for the appointment of said commissioners of appraisal for the purpose of condemning, terminating and acquiring such franchises, rights, privileges and property therein specified. Said petition shall contain a general description of the franchises, grants, easements, tracks, properties or appurtenances sought to be acquired or extinguished and such notice, so served, shall be sufficient notice to such corporation without publication thereof. Said application shall be made to the supreme court at a special term in the judicial district in which said city is situated. The provisions of chapter four of the laws of eighteen hundred and ninety-one as amended relative to the acquisition of property for public uses thereunder shall apply to such application and to the appointment, powers, procedure, compensation and report of the commissioners and other public officers acting for the purpose of such condemnation under this act. Said commissioners shall take testimony and shall make a report with all convenient speed, which report shall include, among other matters deemed to be relevant and proper in such report, a statement of the source, nature and extent of each franchise, privilege or right lawfully possessed by such rail-

way company or companies as found by them and condemned and terminated in such proceeding, the value thereof and, if more than one franchise, they shall state such value separately, a statement of the tracks, property and appurtenances so condemned and the value thereof. Such report shall fix the compensation if any, which the commissioners find to be reasonable and proper to be made to such railway company or companies for such franchise so condemned and terminated and for the tracks, property and appurtenances thereto so taken and condemned. Notice of an application to confirm such report may be given by any party thereto, by serving a copy of said report on the attorney or attorneys for the railroad corporation or corporations or upon the counsel to the corporation with notice that an application shall be made for such confirmation to the supreme court not less than ten days thereafter at a time and place therein provided and no publication of notice or of the filing of such report shall be required.

§ 5. No such franchise shall terminate nor shall the right, title or interest of such railroad company or companies in the same or in the tracks, properties or appurtenances to be condemned and acquired in such proceeding, cease or terminate until the entry of a final order made by the supreme court confirming the report of such commissioners and the court on making such order shall fix a date not more than one year thereafter on which the right to operate such railway or exercise such franchise and to use such tracks, property or appurtenances shall cease and determine, and in case an appeal be taken from such order of confirmation such time shall be further extended for a like period after the entry of an order of affirmance on such appeal. During such period it shall be lawful for such railroad company or companies to continue the use of such franchise or franchises or of the tracks, property or appurtenances sought to be condemned or acquired, as if no such proceeding had been instituted. The award, if any, made to such commissioners and confirmed by said court shall become payable on the expiration of such period with interest thereafter, and such award with the cost and expenses incident to such proceeding shall be borne and paid by the city of New York by the issue and sale of corporate stock of the city of New York, and the board of estimate and apportionment shall be authorized to issue and sell such stock as shall be necessary for such purpose, in like manner as corporate stock is by law issuable for the payment of damages awarded by commissioners of estimate and assessment in reports confirmed in proceedings taken to open streets, roads, avenues, boulevards or public parks. Such corporate stock may be authorized to be issued by said board without the concurrence or approval of any other public board or body.

§ 6. The board of rapid transit commissioners is authorized and empowered to discontinue any and all legal proceedings taken under this act for condemning such franchise or franchises and acquiring the tracks, property or appurtenances of such railway company or companies or any part thereof at any time before the confirmation of the report of the commissioners in such proceeding, if, in its opinion, the public interest requires such discontinuance and with power to cause new proceedings to be taken in such cases for the appointment of new commissioners.

§ 7. Nothing in this act contained shall be construed in any wise to abridge or affect the powers of the city of New York or of any proper and

authorized board or public officer of said city to prevent the unlawful use by any railway company or corporation or* any street, avenue, public park or place in said city.

§ 8. Nothing in this act contained shall be held to affect or apply in any way to a corporation operating a steam surface railroad in the city of New York for the purpose only of transporting freight from its wharves, docks or piers to its freight yards or depots in said city over tracks not more than one-half mile in length.

§ 9. This act shall take effect immediately.

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*So in original.

APPENDIX M.

RULES OF PROCEDURE.

APPENDIX M.

RULES OF PROCEDURE.

STATE OF NEW YORK.

THE PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT

Has adopted the following rules of procedure for the orderly conduct of business before it. They are subject to change by the Commission.

RULE I.

SESSIONS OF THE COMMISSION.

Sessions of the Commission for the consideration of matters arising under chapter 4 of the Laws of 1891 as amended (the Rapid Transit Act) will be held each week on Friday at 10:30 A. M.

Session for hearing contested matters, or matters involving the taking of testimony, arising under the provisions of chapter 429 of the Laws of 1907 (the Public Service Commissions Law) will be held on such days and at such hours as the Commission may designate.

Sessions for receiving, considering and acting upon petitions, applications and other communications, and also for considering and acting upon any business of the Commission, other than the hearing of matters set forth above will be held at its office at 10:30 A. M. and 2 P. M., daily.

Sessions for the investigation of accidents resulting in loss of life, or injury to persons or property, and which in the judgment of the Commission shall require investigation, may be held at any time and place.

RULE II.

ADDRESS OF THE COMMISSION.

All applications, complaints, petitions or answers in any proceeding, or applications or communications in relation thereto, or other communications or letters or telegrams, must be addressed to the Commission at No. 154 Nassau street, borough of Manhattan, New York city, unless otherwise specially directed.

RULE III.

INFORMATION TO PARTIES.

The secretary to the Commission will, upon request, advise any party as to the form of petition, answer, or other paper necessary to be filed in any case, and furnish such information from the files of the Commission as will conduce to a full presentation of facts material to a controversy.

RULE IV.

REPORT OF ACCIDENTS.

Every common carrier, railroad corporation and street railroad corporation is required to give immediate notice to the Commission of every accident happening upon any line of railroad or street railroad owned, operated, controlled or leased by it, within the territory of the first district, by telephone or telegraph, and by written communication as set forth in an order issued by this Commission and served upon such corporation.

RULE V.

PARTIES TO CASES.

Any person or corporation aggrieved may enter a complaint with the Commission by petition or complaint, in writing, as to any matter within the jurisdiction of the Commission.

The Commission may itself institute an investigation or inquiry.

RULE VI.

COMPLAINTS.

1. The Commission may, or will, on its own motion, investigate or make inquiry, in a manner to be determined by it, in accordance with section 48, subdivision 1, of the act.

2. Complaints made pursuant to section 48 of the act by any person or corporation, must be by petition or complaint in writing, setting forth briefly the facts claimed to constitute a violation of the act. The name of the person or corporation complained against should be stated in full, and the address of the petitioner, or complainant, with the name and address of his attorney or counsel, if any, must appear upon the petition or complaint.

3. Complaints, to secure investigation by the Commission, against gas or electric corporations as to the illuminating power, purity, pressure or price of gas, or the initial efficiency of the electric incandescent lamp supply, or the regulation of the voltage of the supply system used for incandescent lighting or price of electricity sold and delivered, must be made under the provisions of section 71 of the act by the mayor of New York city, or by complaint in writing by not less than one hundred customers or purchasers of gas or electricity.

RULE VII.

SERVICE OF COMPLAINT.

The Commission will cause a copy of a complaint to be forwarded to the person or corporation complained of, accompanied by an order, directed to such person or corporation, requiring that the matters complained of be satisfied, or that the charges be answered in writing within a time to be specified by the Commission.

RULE VIII.

ANSWERS.

A person or corporation complained against must answer within ten days from the date of the order above provided for, but the Commission may, in a particular case, require the answer to be filed within a shorter time.

The original answer must be filed with the secretary of the Commission at its office, and a copy thereof at the same time served, personally or by mail, upon the complainant, who must forthwith notify the secretary of its receipt. The answer must specifically admit or deny the material allegations of the petition, and also set forth the facts which will be relied upon to support any such denial.

If a person or corporation complained against shall make satisfaction before answering, a written acknowledgment thereof, showing the character and extent of the satisfaction given, must be filed by the complainant, and in that case the fact and manner of satisfaction, without other matter, may be set forth in the answer. If satisfaction be made after the filing and service of an answer, such written acknowledgment must also be filed by the complainant, and a supplemental answer setting forth the fact and manner of satisfaction must be filed by the person or corporation complained against.

RULE IX.

SERVICE OF PAPERS.

Copies of notices or other papers must be served upon the adverse party or parties, personally or by mail; and when any party has appeared by attorney, service upon such attorney shall be deemed proper service upon the party.

RULE X.

AMENDMENTS.

Upon application of any party, amendment to any petition or answer in any proceeding or investigation, may be allowed by the Commission in its discretion.

RULE XI.

ADJOURNMENTS AND EXTENSIONS OF TIME.

Adjournments and extensions of time may be granted upon the application of any party in the discretion of the Commission.

RULE XII.

STIPULATIONS.

The parties to any proceeding or investigation before the Commission may, by stipulation in writing, filed with the secretary, agree upon the facts or any portion thereof involved in a controversy, which stipulation shall be regarded and used as evidence on the hearing. It is desirable that the facts be thus agreed upon whenever practicable.

RULE XIII.

HEARINGS.

Upon issue being joined by the service of an answer or notice of hearing on a petition or complaint, the Commission will assign a time and place for hearing the matter, which will be at its office unless otherwise ordered. Witnesses will be examined orally before the Commission, unless otherwise ordered by this Commission, or unless the facts be agreed upon as provided for in these rules. The complainant or petitioner must in all cases establish

the facts alleged to constitute a violation of the act unless the person or corporation complained against admits the same or fails to answer. The person or corporation complained against must also prove facts alleged in the answer, unless admitted by the petitioner, and fully disclose its defence at the hearing.

In case of failure to answer, the Commission will take such proofs of the facts as may be deemed proper and reasonable, and make such order thereon as the circumstances of the case appear to require.

Cases shall be argued orally upon submission of the testimony, unless a different time shall be agreed upon by the parties or directed by the Commission, but all arguments may be omitted in the discretion of the Commission.

Hearings will be held by or before the Commission or by or before a Commissioner designated by the Commission.

RULE XIV.

WITNESSES AND SUBPOENAS.

Subpoenas requiring the attendance of witnesses for the purpose of taking the testimony of such witnesses orally before one or more members of the Commission, or by deposition, will, upon the application of either party, or upon an order of the Commission directing the taking of such testimony, be issued by any member of the Commission or by the secretary.

Subpoenas for the production of books, papers or documents (unless directed to issue by the Commission upon its own motion) will only be issued, in the discretion of the Commission, upon application in writing.

RULE XV.

PROPOSED FINDINGS AND BRIEFS.

Proposed findings embracing material facts claimed to be established by the evidence and referring to the particular part of the record relied upon to support each finding proposed, should be filed by each party. Printed or written arguments or briefs may be filed by any party. The copy of the proposed findings, brief or argument filed on behalf of any party must at the same time be served upon the adverse party or parties, personally or by mail, and notice of such service thereupon filed with the secretary of the Commission. The time within which the proposed findings and printed or written arguments or briefs shall be filed in any case will be determined by the Commission upon submission of the testimony.

RULE XVI.

RE-HEARINGS.

After an order has been made by the Commission, any party interested therein may apply for a re-hearing in respect to any matter determined therein, and the Commission may grant and hold such a re-hearing, if, in its judgment, sufficient reason therefor be made to appear; if a re-hearing shall be granted, the same will be determined by the Commission within thirty days after the same shall be finally submitted.

RULE XVII.

ORDERS.

Whenever the Commission shall investigate any matter complained of by the person or corporation aggrieved, it will make and file an order either dismissing the petition or complaint or directing the person or corporation complained of to satisfy the cause of complaint in whole or to the extent which the Commission may specify and require.

RULE XVIII.

SERVICE AND EFFECT OF ORDERS.

The orders of the Commission will be served and will take effect as prescribed in section 23 of the act.

RULE XIX.

FEES OF WITNESSES.

Witnesses shall be entitled to the fees prescribed by section 19 of the act.

RULE XX.

HEARING UPON A PROPOSED CHANGE OF LAW.

The Commission may, in its discretion, order a hearing upon the request of any person or corporation as to the advisability of any proposed change of law relating to any common carrier, railroad corporation or street railroad corporation, or as to the advisability of recommending the enactment of legislation with respect to any matter within its jurisdiction.

RULE XXI.

GOVERNING THE PROCEDURE TO OBTAIN THE PERMISSION AND APPROVAL OF THE COMMISSION TO THE CONSTRUCTION AND OPERATION OF EXTENSIONS OF STREET SURFACE RAILROADS; WHOLLY WITHIN THE LIMITS OF ANY CITY OR INCORPORATED VILLAGES:

First. The application for such permission and approval shall be by petition verified by the president or other officer of the street surface railroad, containing the matter hereinbelow required and asking that the Commission determine that such construction and operation is necessary or convenient for the public service, and give its permission and approval thereto.

Second. With the petition there shall be filed with the Commission:

(a) A copy of the articles of association of the street surface railroad corporation, certified by the Secretary of State and the county clerk, and showing the date of filing.

(b) Copies of all statements filed at any time in procuring extensions heretofore authorized and constructed, certified by the Secretary of State and the county clerk and showing the date of filing.

(c) A copy of the statement of the names and descriptions of the streets,

roads, avenues and highways in or upon which it is proposed to construct, maintain and operate such extensions or branches filed pursuant to section 90 of the Railroad Law and for which construction and operation the permission and approval of the Commission is sought. Said copy to be certified by the Secretary of State and the county clerk and to show the date of filing.

(d) A certified copy of the written application for the consent of the local authorities to the construction and operation of such extension, and the consent of the local authorities granted thereon, if such consent has been granted; and, if not, the petition shall contain a statement to that effect.

(e) A certified copy of the report of the Commission appointed by the Appellate Division of the Supreme Court pursuant to section 94 of the Railroad Law and the order of the court thereon, if such report and order have been made, and if such report and order have not been made the petition shall contain a statement to that effect.

(f) A map of the said extension as proposed showing the streets, avenues and highways in or upon which it is proposed to construct such extension.

(g) All copies of documents so filed shall be printed or typewritten and so far as practicable shall be upon paper eight by eleven inches in size, and bound on the left edge.

Third. The petition shall

(a) Show whether the consent of the abutting property owners has been obtained and recorded, and if recorded the time and place thereof.

(b) State that the company has not prior to June 6, 1907, received a certificate of public convenience and necessity for the construction of such extension.

Fourth. If any of the documents hereinabove required have been already filed with the Commission, duplicates need not be filed, but the petition shall show that they have already been filed and the date of filing.

Fifth. Upon receipt of such petition, the Commission shall appoint a time and place for a hearing upon such application, giving to the applicant ten days notice thereof, either personally or by mail; and the applicant shall publish at least three days prior to such hearing, a notice of such application and hearing, setting out the names and description of the streets, roads and avenues in and upon which it is proposed to construct and operate such extension or such matter as the Commission may require, in such newspapers and at such times as the Commission shall direct. The Commission may at the request of the applicant or on its own motion prescribe a shorter notice for such hearing and modify the directions for publication accordingly.

Sixth. At the hearing proof must be made to the satisfaction of the Commission that the construction of such extension and the exercise of such franchise of operating the same is necessary or convenient for the public service.

Seventh. Proof must be made of the *bona fides* of the enterprise, and of the financial ability of the applicant to build the extension.

RULE XXII.

GOVERNING APPLICATIONS FOR THE PERMISSION AND APPROVAL OF THE COMMISSION FOR THE CONSTRUCTION OF A RAILROAD OR OF A STREET RAILROAD OR AN EXTENSION OF A RAILROAD OR OF A STREET SURFACE RAILROAD NOT WHOLLY WITHIN THE LIMITS OF ANY CITY OR VILLAGE, OR FOR THE EXERCISE OF A FRANCHISE OR RIGHT NOT THERETOFORE LAWFULLY EXERCISED.

First. The application for such permission and approval shall be by petition verified by the president or other officer of the corporation, containing the matter hereinbelow required and asking that the Commission determine that such construction or the exercise of such franchise is necessary or convenient for the public service and give its permission and consent thereto.

Second. With the petition shall be filed all documents required by the provisions of Rule XXI to be filed in proceedings under such rule, and any other documents or certified copies of records evidencing the franchise or right in question and its nature and extent, or extending, modifying or changing any of the purposes or powers of the applicant corporation.

Third. The petition shall

(a) Show whether in a proper case the consent of the abutting property owners has been obtained and recorded, and if recorded the time and place thereof.

(b) Show whether the company has prior to June 6, 1907, received any certificate of public convenience and a necessity for any purpose, and if so a certified copy of the same should be annexed.

(c) If the application is for permission to exercise a franchise or right not theretofore lawfully exercised, the reason why said franchise or right has not been theretofore exercised.

(d) Any other matter pertinent to the application.

Fourth. If any of the documents herein required have been already filed with the Commission, duplicates need not be filed, but the petition shall show that they have already been filed, and the date of filing. All copies of documents filed shall be printed or typewritten and so far as practicable shall be upon paper eight by eleven inches in size and bound on the left edge.

Fifth. Upon filing such petition the Commission shall fix a time and place for a hearing thereon, giving the applicant ten days notice thereof, either personally or by mail, and the applicant shall publish at least three days prior to such hearing a notice of such application and hearing, setting forth specifically the route of the railroad or street railroad or the extension thereof which it is proposed to construct, or the nature of the franchise or right which it is proposed to exercise, or such other matter as the Commission may require, in such newspapers and at such times as the Commission may direct. The Commission may at the request of the applicant or of its own motion prescribe a shorter notice for such hearing and modify the directions for publication accordingly. The Commission may at the hearing or any adjourned session require the applicant to file any other documents or records and to produce any evidence or proof which the Commission may deem pertinent to the application.

Sixth. At the hearing proof must be made by the applicant to the satis-

faction of the Commission of full compliance with all provisions of law, respecting its organization and its right to construct the railroad, street railroad or extension, and its right to exercise such franchise or right, and that the construction and operation of the railroads or street railroad or extension or the exercise of the franchise or right, is necessary or convenient for the public service. If the application is for the extension of a street surface railroad beyond the limits of any city or incorporated village, the applicant must show whether it will be practically parallel with a street surface railroad already constructed and in operation. In all cases, proof must be made of the *bona fides* of the enterprise and of the financial ability of the applicant to construct the railroad, street railroad or extension or to operate or use the franchise or right in such way as to benefit the public service.

RULE XXIII.

GOVERNING APPLICATIONS UNDER SECTION 54 OF THE PUBLIC SERVICE COMMISSIONS LAW.

First. The applications shall be by petition verified by the president or other officer of the corporation, containing the matter hereinbelow required and asking that the Commission give the approval, permission or consent, which the applicant desires.

Second. With the petition shall be filed the following papers:

(a) A copy certified by the Secretary of State and county clerk, or other officer with whom the same are by law required to be filed, of the articles of association of the corporations which are parties to the proposed assignment, transfer, lease, contract or agreement, or which propose to be parties to the purchase, sale, acquisition or taking or holding the capital stock.

(b) Duly certified copies of all certificates, statements or other documents which modify, extend or change the purpose or powers of such corporations, or any of them.

(c) A form of the proposed instrument of assignment, transfer, lease, contract or agreement which shall contain a detailed description of the franchise or rights referred to or affected by such proposed assignment, transfer, lease, contract or agreement.

(d) If the application is made for authority to hold stock as collateral, a certified copy of the certificate of organization of the proposed pledges.

Third. The petition shall contain a full and complete statement of the reasons for such assignment, transfer, lease, contract and agreement and the purposes thereof. If the petition asks for the authorization of the Commission of the purchase or acquisition, or taking or holding by a railroad corporation or street railroad corporation of any part of the capital stock of a like corporation or common carrier, or for a stock corporation to take or hold more than ten percentum of the capital stock of a railroad or street railroad corporation or a common carrier as collateral security, the petition shall contain a full statement of the proposed transaction and the reasons therefor. The petition shall contain any other statement or information which may be pertinent to the application.

Fourth. If any of the documents hereinabove required have been already filed with the Commission, duplicates need not be filed, but the petition shall

show that they have already been filed and the date of filing. The Commission may, in its discretion, dispense with filing any of the foregoing papers. All papers filed should be printed or typewritten on paper eight by eleven inches in size, and bound on the left edge.

Fifth. On filing the said petition, the Commission may grant the application *ex parte* and give its consent, permission, authorization or approval as the case may be, or it may fix a time and place for hearing the application, and the applicant shall give such notice thereof either by publication thereof or service upon specified persons, or both, as the commission may direct.

Sixth. At the hearing proof must be made that such assignment, transfer, lease, contract or agreement or the purchase or acquisition of stock, as the case may be, is for the benefit of the public service.

RULE XXIV.

GOVERNING APPLICATIONS UNDER SECTIONS 55 AND 69 OF THE PUBLIC SERVICE COMMISSIONS LAW, FOR THE APPROVAL OF THE ISSUE OF STOCK, BONDS, NOTES AND OTHER EVIDENCE OF INDEBTEDNESS.

First. All applications shall be by petition verified by the president or other officer of the corporation, containing the matter hereinbelow required and asking for an order authorizing the issue desired.

Second. With the petition shall be filed:

(a) A copy of the certificate of organization of the petitioning corporation, certified by the Secretary of State and the county clerk.

(b) Duly certified copies of all certificates, statements or records which modify, change or extend the purposes or powers of such corporation, showing when and where such documents were filed or entered.

(c) Duly certified copies of any certificate, record or order required by law to be made or filed in order to authorize the corporation to exercise any of its franchises or rights.

(d) If the application is in regard to an increase or reduction of capital stock a certificate of the proceedings at the meeting of the stockholders, or the unanimous consent thereof.

(e) If the application is in regard to a mortgage, proof of the consent of the stockholders under the statute.

Third. The petition shall contain:

(a) A sworn statement in detail of the financial condition of the company, giving the amount and kinds of the capital stock outstanding and the rate and amount of dividends declared thereon during the past five years, the outstanding indebtedness, whether and how secured, and if secured by mortgage or pledge, a copy of the instrument shall be annexed to the petition, a description of the road, and in general terms of its equipment, and a statement of the cost of its existing property. It shall contain a statement of the amount of any of its stock held by other corporations and their names and the amount held by each.

(b) A statement of the amount and kind of stock which the corporation desires to issue, and, if preferred the rate of dividends secured to be paid by it, and whether cumulative, a statement of the amount of bonds, notes and other evidence of indebtedness which the corporation desires to issue, the

terms, the rate of interest and whether and how to be secured, and if to be secured by a mortgage or pledge, the terms thereof.

(c) A statement of the use to which the capital to be secured by the issue of such stock, bonds, notes or other evidence of indebtedness is to be put with a definite statement of how much is to be used for the acquisition of property, how much for the construction, completion, extension or improvement of facilities, how much for the improvement of its service, how much for the maintenance of its service, and how much for the discharge or refunding of its obligations.

(d) A statement in detail of the property which is to be acquired with its value, a detailed description of the construction, completion, extension or improvement of facilities set forth in such a manner that an estimate may be made of its cost, a statement of the character of the improvement of its service proposed, and of the reasons why the service should be maintained from its capital; if it is proposed to discharge or refund its obligations, a statement of the nature and description of such obligations including their par value and the amount for which they were actually sold and the application of the proceeds.

(e) A statement showing whether any contracts have been made for the acquisition of such property, or for such construction, completion, extension or improvement of facilities, or for the disposition of any of the stock, bonds, notes or evidence of indebtedness which it is proposed to issue or the avails thereof, and if any such contracts have been made, copies thereof should be annexed to the petition.

(f) A statement showing whether any of the outstanding stock or bonds or other obligations of the company have been issued or used in capitalizing any franchise or any right to own, operate or enjoy any franchise or any contract for consolidation or lease, and if so, the amount thereof and the franchise, right, contract or lease so capitalized.

(g) If the stock is to be issued by a corporation formed by the merger or consolidation of two or more other corporations, the petition shall contain a complete statement of the financial condition of the corporations so consolidated, of the kind required by subdivision (a) hereinabove set forth, and of their capital stock at the par value thereof.

(h) The petition shall contain a statement of any other facts pertinent to the application.

Fourth. If any of the documents have been filed with the Commission, duplicates need not be filed, but the time of filing shall be given. All papers should be printed or typewritten, and so far as practicable be on paper eight by eleven inches in size and bound on the left edge.

Fifth. On receipt of the petition, the Commission shall fix a time and place for a hearing thereon, and shall give to the applicant not less than ten days notice thereof, either personally or by mail; the applicant shall publish a notice of the application and the time and place of the hearing, in such newspapers and at such times as the Commission shall direct. The Commission may prescribe the terms and contents of such publication. The Commission may at the request of the applicant, or on its own motion, prescribe a shorter notice for such hearing and modify its directions for publication accordingly.

Sixth. At the hearing the applicant shall produce such witnesses and furnish such books, papers, documents and contracts as the Commission shall at any time before final decision on the application require, and must establish to the satisfaction of the Commission that the proposed issue of stocks, bonds, notes or other evidence of indebtedness is for the benefit of the public service.

RULE XXV.

The form and contents of complaints made as provided in section 71, regarding the price of gas and electricity, shall be as follows:

(1) The said complaint shall be directed to the Public Service Commission for the first district. It shall state the names of the corporations supplying gas or electricity, as the case may be, either within the city of New York or within such subdivision thereof, either borough or county, as the complainants may desire to include within the complaint.

(2) It shall state that each of such companies is a corporation, if such be the fact, and that such corporations are authorized to sell, manufacture and supply gas or electricity, as the case may be, for heat, light or power within the said territory, and that they are actually engaged in manufacturing, selling and supplying either gas or electricity for the purposes aforesaid.

(3) If the complaint is against gas companies, it shall state whether it is directed to the illuminating power or purity or the pressure or the price of gas. If against electrical companies, whether directed to the initial efficiency of the electric incandescent lamp supply or the regulation of the voltage of the supply system used for incandescent lighting or the price, and it shall specify the respects wherein the service is otherwise inadequate or the methods unreasonable, and if it is claimed that the price is excessive and unreasonable the price actually charged by such companies should be set forth, and the respects wherein or the reasons why it is unreasonable specified.

(4) The complaint shall state that each of the complainants is a customer or purchaser of either gas or electricity, as the case may be, from one or more of the said companies against whom the complaint is made.

(5) If the complaint is that the price of either gas or electricity is excessive, it should state that the price is excessive, unfair and unreasonable and is disproportionate to the proper cost of manufacturing and delivering either gas or electricity in the locality mentioned.

(6) The complaint may also contain any other specification of any illegal act on the part of said companies, or any violation of the charter or franchises of said companies or any of them, in respect of the manufacture, sale or supply of gas or electricity, or in its methods of conducting its business, and should demand the relief which the complainant desires.

(7) The complaint must be signed by not less than one hundred customers or purchasers of gas or electricity in the city of New York, or in such lesser territory as is included in the complaint, and the address of each signer shall be stated.

(8) A single complaint shall not include both gas and electricity.

(9) Upon such complaint being filed an order for a hearing shall be made returnable at such time as the Commission may direct. Such order may

also include such other matters as the Commission may desire to be included in the investigation or hearing. A certified copy of the order with a copy of the complaint shall be served on each corporation affected thereby, and the hearing shall proceed at the time and place designated or at such other time to which the Commission or the Commissioner presiding may adjourn the same.

APPENDIX N.

OPINIONS OF COUNSEL AND DECISIONS OF COURT.

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OPINIONS OF COUNSEL AND DECISIONS OF COURT.

JURISDICTION OF THE COMMISSION FOR THE FIRST DISTRICT — CANAL BOAT LINES — DISCRIMINATION.

July 31, 1907.

TRAVIS H. WHITNEY, Esq., *Secretary, Public Service Commission for the First District:*

DEAR SIR.— I am in receipt of your letter of July 25th, transmitting to me two letters, one bearing date July 9, 1907, and the other July 22, 1907, addressed to the Commission by G. P. Simmons, Agent for the Surrny Canal Line, pier 6, East river, in which he states to the Commission that four mercantile concerns dealing apparently in sugar at wholesale, have refused to ship sugar freight prepaid over his line, even where consignees have requested such prepaid shipments to be made. It also appears that the canal line conducts a transportation business which includes Utica, Rome, Syracuse, and Rochester, New York.

I do not think that the Public Service Commission for the first district has jurisdiction of the matter called to its attention by Mr. Simmons in these letters, for this case involves a question of discrimination not by common carriers but by mercantile houses. Even if the question involved the transportation of property from New York to interior cities by common carriers, subject to the Public Service Commissions Law, the Commission for the first district would have no control over it.

I herewith return the communications referred to.

Yours very truly,

ABEL E. BLACKMAR,

Counsel to the Commission.

JURISDICTION OF THE COMMISSION FOR THE FIRST DISTRICT — RAILROADS OTHER THAN STREET RAILROADS.

August 8, 1907.

TRAVIS H. WHITNEY, Esq., *Secretary, Public Service Commission for the First District:*

DEAR SIR.— I am in receipt of your letter bearing date August 3, transmitting a communication from Ralph Peters, president and general manager, respecting Order No. 1, covering the New York and Rockaway Beach Railway Company, the New York, Brooklyn and Manhattan Beach Railway Company,

and the Glendale and East River Railroad Company, in which you note that it seems significant that Mr. Peters has not included the Long Island Railroad in the list of companies for which he has given written acceptance. You asked me to suggest a proper answer in this matter.

I would suggest that you write to Mr. Peters, that inasmuch as by the provisions of the Public Service Commissions Law, the Public Service Commission for the first district is given jurisdiction over the Long Island Railroad, in so far as concerns the construction, maintenance, equipments, terminal facilities, local transportation facilities and local transportation of persons or property within the first district, and is directed to investigate the cause of all accidents and to require railroad corporations to give notice of every accident happening upon any line of railroad operated within the territory over which the Commission has jurisdiction, it will be necessary for the Long Island Railroad to give written acceptance of Order No. 1, and to make to this Commission the report therein required.

Yours very truly,
ABEL E. BLACKMAR,
Counsel to the Commission.

FEES — ACCOUNTING FOR — PUBLIC SERVICE COMMISSIONS LAW, SECTION 18 — RAPID TRANSIT ACT, SECTION 37.

August 9, 1907.

TRAVIS H. WHITNEY, Esq., *Secretary, Public Service Commission for the First District:*

DEAR SIR.— I am in receipt of your letter of August 8th, inquiring whether the fees payable to the Public Service Commission under section 37 of the Rapid Transit Act for copies of proposed contracts are to be turned over to the city of New York, or whether the same may be used for the purposes of the Commission.

I am of the opinion that under section 18 of the Public Service Commissions Law, these fees charged and collected by the Commission for the first district belong to the city of New York, and are to be paid monthly accompanied by a detailed statement thereof into the treasury of the city.

Yours very truly,
ABEL E. BLACKMAR,
Counsel to the Commission.

JURISDICTION — COMMISSIONS FIRST DISTRICT AND SECOND DISTRICT — TESTING OF GAS METERS.

August 9, 1907.

TRAVIS H. WHITNEY, Esq., *Secretary, Public Service Commission for the First District:*

DEAR SIR.— I am in receipt of your letter of August 8th, transmitting a letter from Mr. Hoxsey, secretary to the bureau of gas and electric meter testing.

I think that the testers of gas meters under the authority of this Commis-

sion are required to prove the accuracy of any and all gas meters intended to be used within the jurisdiction of the Commission for the first district. I think that all gas meters intended to be used within the territory covered by the jurisdiction of the Public Service Commission for the second district are required to be proved by testers under the jurisdiction of the Public Service Commission for the second district.

The practical answer to the inquiry made by Mr. Hoxsey is, therefore, that he should not test gas meters which are to be installed within the jurisdiction of the Public Service Commission for the second district.

Yours very truly,

ABEL E. BLACKMAR,

Counsel to the Commission.

JURISDICTION — COMMISSION FOR THE FIRST DISTRICT — RAILROADS OTHER THAN STREET RAILROADS — RATES.

August 9, 1907.

TRAVIS H. WHITNEY, Esq., *Secretary, Public Service Commission for the First District:*

DEAR SIR.— I am in receipt of your letter of July 24th, transmitting a communication bearing date July 8th, from Henry S. Livingston, of Spuyten Duyvil, New York, making an inquiry as to why the New York Central and Hudson River Railroad Company should be permitted to charge more than five cents for one fare within the city limits, and stating that the fare from Forty-second street to Spuyten Duyvil is twenty cents.

Prior to an investigation of the charter of the New York Central and Hudson River Railroad Company and the various acts which in the past have affected this matter, it is not possible to answer this question more definitely than to say that the reason why the street surface railroads charge five cents for transportation over a distance for which the New York Central and Hudson River Railroad Company charges twenty cents, is based in part upon the difference in the franchises of the two sets of corporations, and the laws governing the same. The matter of the commutation rate from Forty-second street to Spuyten Duyvil and any increase in such commutation rate is, in my opinion, a matter within the jurisdiction of the Public Service Commission for the first district.

I return you herewith letter of Mr. Livingston to you.

Yours very truly,

ABEL E. BLACKMAR,

Counsel to the Commission.

NOTIFICATIONS FROM COMMISSION — ACKNOWLEDGMENT OF — PUBLIC SERVICE COMMISSIONS LAW, SECTION 23.

August 15, 1907.

TRAVIS H. WHITNEY, Esq., *Secretary, Public Service Commission for the First District:*

DEAR SIR.— I am in receipt of your letter of August 12, inquiring as to the provision of section 23 of the Public Service Commissions Law, respecting

notice by corporations to the Commission of the receipt of certified copies of orders, and referring to a letter of William Greenough, said to be an attorney for the New York, New Haven and Hartford Railroad.

I think that in the case of such a corporation, the notification to the Public Service Commission of the receipt of its order given by the corporation to which it is addressed must be signed by a person or officer duly authorized, and should be acknowledged by him in the form prescribed by law for the acknowledgment of deeds by corporations to be used in this State. I think, however, that the provision for acknowledgment is merely directory, and that a communication admitting the receipt of an order, if signed by the president, secretary or general manager of the corporation, may be accepted by you without acknowledgment, if you wish to do so, but do not think an attorney can be presumed to have any authority to admit receipt of such orders except, perhaps, after proceedings before the Commission have been instituted, in which he has entered formal appearance, and that in his case a formal acknowledgment of the notification should be required.

It will not be proper for you to state to Mr. Greenough that such notification may be sent to the Public Service Commission by mail. It is the duty of the railroad company to give the notification to the Commission required by the section of the law, and it is not material how the notice is transmitted, provided it is received, but you may not authorize any corporation to commit its required notification to the risk of the mails.

Very truly yours,
ABEL E. BLACKMAR,
Counsel to the Commission.

ACCIDENTS — NOTICE OF — RAILROAD TERMINALS, ETC. — PUBLIC SERVICE COMMISSIONS LAW, SECTIONS 47 AND 86.

September 6, 1907.

TRAVIS H. WHITNEY, Esq., *Secretary, Public Service Commission for the First District:*

DEAR SIR.— I am in receipt of your letter bearing date September 3d, inquiring as to whether you should have the order requesting reports of accidents served on the Pennsylvania Railroad, Delaware, Lackawanna and Western and railways of that description which have ferry terminals or freight yards in the first district.

I have considered a provision of section 86 of the Public Service Commissions Law, to the effect that nothing in the acts contained should be deemed to apply to or operate upon interstate or foreign commerce.

I think, nevertheless, that such railroads as you mention are within the jurisdiction of the Commission in respect of their terminal facilities; that they are subject to the provisions of section 47 of the Public Service Commissions Law, and that the order mentioned should be served upon them and that reports pursuant thereto required from them respecting accidents happening within the territory of the first district.

Very truly yours,
ABEL E. BLACKMAR,
Counsel to the Commission.

ACCIDENT REPORTS — NOT OPEN TO EXAMINATION — PUBLIC SERVICE COMMISSIONS LAW, SECTION 47.

September 10, 1907.

TRAVIS H. WHITNEY, Esq., *Secretary, Public Service Commission for the First District:*

DEAR SIR.— I am in receipt of your letter of September 9th, transmitting a communication from George W. Smyth, inquiring whether reports of accidents occurring on the street railway systems which the Commission has ordered to be filed by the railroad companies, are open to inspection. He says that he is prompted in the inquiry by the fact that he is interested as attorney for the plaintiff in an action arising from such an accident.

It is provided by section 47 that such notices shall not be admitted as evidence or used for any purpose against such common carrier, railroad corporation or street railroad corporation giving such notice in any suit or action for damages growing out of any matter mentioned in the notice.

I am, therefore, of the opinion that the notices referred to in Mr. Smyth's communication are not open to inspection by him.

Very truly yours,
ABEL E. BLACKMAR,
Counsel to the Commission.

ELECTRICITY RATES — DISCRIMINATION — DISCONTINUANCE OF SERVICE — TRANSPORTATION CORPORATION LAW, SECTIONS 65, 66.

September 13, 1907.

Public Service Commission for the First District:

GENTLEMEN.— I am in receipt of your communication regarding the complaints made by the Mutual Inspection and Adjustment Company in behalf of Henri Mouquin and of Messrs. Vogler and Vogler, both against the New York Edison Company. The first of these complaints refers to an alleged discrimination in charges, and the second to an arbitrary discontinuance of the electric light connection.

It seems to me that both of these complaints are well founded. It was decided in the case of Armour Packing Company against the Edison Electric Illuminating Company, 115 App. Div. 51, that electric lighting companies are by law under an obligation to furnish service without discrimination in price under similar circumstances and conditions. In that case, the plaintiff sued to recover payments made to the defendant, on the allegation that the defendant was at the same time and under similar circumstances and conditions furnishing electricity to others at a less rate, and upon demurrer the court upheld the sufficiency of the complaint.

The complaint of Messrs. Vogler and Vogler is also well founded. In Mr. Norton's letter to Mr. Whitney accompanying the complaint, he suggests that a report be made upon the following fundamental legal points involved:

> " (a) The right of the New York Edison Company, a monopolistic public service corporation, to cancel their agreements and disconnect ser-

vice on thirty days notice, if a customer has paid all bills presented in full.

"(b) The right of the New York Edison Company to increase its rates to customers after contract has been once entered into."

Regarding the first of these propositions, I would report that in my opinion an electrical corporation has no right to cancel and disconnect service arbitrarily, unless the customer is in default in payment of bills duly rendered.

Section 65 of chapter 566 of the Laws of 1890, known as chapter 40 of the general laws, requires that gas companies and electric lighting companies furnish services on demand to persons who apply for it in writing, and whose premises are within one hundred feet of a gas main or electric wire.

Section 66 provides that the lighting companies may require a reasonable deposit to secure the payment for two months service. If the applicant for service is willing to make the deposit, and makes a formal demand, it is the duty of the lighting company to make the connection and furnish the service; and it necessarily follows that such a company is without right to disconnect the service arbitrarily. It seems to me equally plain that they have not the right to require a yearly contract as a condition for making the service, for such a requirement in many instances would practically nullify the provisions of section 65 of the law above referred to.

I am also of the opinion that the New York Edison Company has no right to increase its rates to customers after contract has once been entered into. The law of 1905 established a maximum of 10 cents per kilowatt hour; but even if the rate established had been an absolute one, contracts theretofore legally made for a less rate would remain binding upon the company. It is elementary that a legislative act cannot impair the obligation of valid contracts already made.

In both of these cases the complainants have a complete remedy in the courts. In the case of discrimination, a suit may be brought under the authority of the Armour Packing Company case above cited, to recover back the excess paid. In the case of disconnection of service, the complainant may make a formal written demand for the connection, and if the company refuses to furnish service he may, under the authority of the section above cited recover a penalty of $10 and $5 for each day during which the refusal continues.

I now consider the power of this Commission in dealing with these complaints. The provisions regarding the supervision and control of gas and electrical corporations are different from those regarding the control of railroads and street railroads. The only provision in the act for orders against gas and electrical corporations is contained in section 72. It is there provided that

"the Commission within lawful limits may, by order, fix the maximum price of gas or electricity to be charged by such corporation or person, or may order such improvement in the manufacture or supply of such gas, in the manufacture, transmission or supply of such electricity, or in the methods employed by such person or corporation as will in its judgment improve the service."

It is obvious that these orders are such as refer to the general service and

not to the enforcement of the rights of an individual against a corporation in isolated cases.

If it is claimed that a general method exists requiring yearly contracts as a condition to service, an investigation might be ordered under section 72, and if such method is found to exist, it could be prohibited by order. The same might be said of discrimination in service, although the concrete case presented seems to me to be an isolated case which could not be made the basis of a general order.

If the Commission desires, I will frame an order for such investigation.

Yours very truly,

ABEL E. BLACKMAR,

Counsel to the Commission.

JURISDICTION — COMMISSION FOR THE FIRST DISTRICT — FERRIES INCLUDED IN RAILROAD — PUBLIC SERVICE COMMISSIONS LAW, SECTION 2.

October 11, 1907.

TRAVIS H. WHITNEY, Esq., *Secretary, Public Service Commission for the First District:*

DEAR SIR.— I have your letter of the 10th inst., transmitting a copy of a letter from Richard L. Leo, dated the 8th inst., complaining of the ferry service maintained by the Long Island Railroad between Thirty-fourth street, in this borough, and Long Island City.

Without reference to the general question of jurisdiction of ferries disassociated with railroad companies, I desire to advise you that in my opinion the Commission has jurisdiction over the case presented by virtue of section 2 of the Public Service Law, which provides in part that "the term 'railroad' includes every railroad ....., with all ferries ..... used, operated, controlled or owned by or in connection with any such railroad."

Yours very truly,

ABEL E. BLACKMAR,

Counsel to the Commission.

JURISDICTION — PUBLIC SERVICE COMMISSIONS LAW, SECTIONS 2, 5 . — "DOING BUSINESS EXCLUSIVELY" — FILING SCHEDULES.

October 25, 1907.

TRAVIS H. WHITNEY, Esq., *Secretary, Public Service Commission for the First District:*

DEAR SIR.— I have your letter of the 19th inst., transmitting a communication from the New York and New Jersey Steamship Company of the 18th inst., inquiring whether they are required to file freight schedules under the Public Service Commissions Act.

The Company, as a freight company, is, as respects its business transactions within this State, within the definition of the term "common carrier" in section 2 of the act; but the company in this case raises the question whether,

since *all* its business is not transacted within the first district, it comes within the jurisdiction of the Commission for that district.

Section 5 provides that the jurisdiction of the Commission for the first district shall extend (Paragraph IV) "to any common carrier operating or doing business exclusively within that district."

The language of this paragraph is ambiguous and immediately gives rise to the question whether, in order to come within the jurisdiction of this Commission, *all* the carrier's business must be transacted in this district or whether the jurisdiction of the Commission attaches to that portion of the business of the company which is transacted exclusively within the district.

I favor the latter view, although there is considerable force in the argument that according to strict rules of grammatical construction the jurisdiction of this Commission only attaches to a company which does all its business here.

The primary object is, of course, to ascertain the intention of the Legislature and the scheme of the act is to place all matters arising within the first district within the jurisdiction of the Commission for that district and all the matters arising in the second district within the jurisdiction of the Commission for that district.

Such companies are, of course, within the jurisdiction of one of the Commissions and it is difficult, keeping in mind the scheme of the act, to understand what reason there would be for placing under the jurisdiction of the Commission for the second district business which is entirely consummated within this district.

In common parlance the words "doing business exclusively" are usually understood as referring to the business transacted and I think the Legislature in adding to the words "operating * * * exclusively" the words "doing business exclusively" intended that the Commission for this district should have jurisdiction not only over those companies which transact their entire business here, but also the business of other companies which is exclusively within this district.

As a practical matter I think it would be well for the Commission to require reports from these companies, basing its action upon the construction which I have given this paragraph. This same reasoning applies to the cases of express companies about which I have conferred with Commissioner Eustis, and in which case it was decided that we should require them to file the schedules called for by the act.

Yours very truly,

ABEL E. BLACKMAR,

Counsel to the Commission.

ACCIDENTS — REPORTING — COMMISSION FOR THE FIRST AND SECOND DISTRICTS — PUBLIC SERVICE COMMISSIONS LAW, SECTION 47.

November 7, 1907.

TRAVIS H. WHITNEY, Esq., *Secretary, Public Service Commission for the First District:*

DEAR SIR.— I have before me a letter of October 31, 1907, from William J. Norton, acting secretary, asking for an opinion on the question as to which

Public Service Commission is the proper recipient of reports upon accidents happening outside of the first district on street railroads operating in both districts.

I am of the opinion that under the Public Service Act such reports should be sent to the Commission for the second district, as suggested by Chairman Stevens in his letter of October 28th addressed to Chairman Willcox.

In my judgment, the question is controlled by the provisions of section 47 of the act, which are as follows:

> "Each Commission shall investigate the cause of all accidents on any railroad or street railroad within its district which may result in loss of life or injury to persons or property and which in its judgment require investigation. Every common carrier * * * is required to give immediate notice to the Commission of every accident happening on any line of railroad or street railroad owned, operated, controlled or leased by it within the territory over which such Commission has jurisdiction in such manner as the Commission may direct."

I am inclined to the opinion that the references to the district in the first sentence above quoted and to the territory in the second sentence, express the same idea, namely, that the obligation to give notice of accidents imposed upon the common carrier and to investigate the cause of the accidents imposed upon the Commission refers to the same accidents, namely, those happening within the territory of the first district. The question is not entirely free from doubt, in view of the phraseology of subdivision 2 of section 5 of the act, but it seems to me that the provisions of section 47 govern.

Very truly yours,

ABEL E. BLACKMAR,

Counsel to the Commission.

JURISDICTION OF COMMISSION — COMMON CARRIER — DEFINED — MEANING OF WORD "INCLUDE" — PUBLIC SERVICE COMMISSIONS LAW, SECTION 2, ETC.

November 12, 1907.

Public Service Commission for the First District:

GENTLEMEN.— I am in receipt of the copy of the letter to the Commission dated September 6th signed by Frank Rutherford, which raises the question whether the Municipal Ferry operated between Manhattan and Richmond is subject to the jurisdiction of this Commission as common carrier.

I have referred this matter to Mr. Harkness with the request that he make a full digest of the provisions of the act which may have a bearing upon its construction in this respect, and also that he examine and report upon the authorities which are in point. I have received from him an elaborate report upon the subject, which I herewith transmit to the Commission.

I concur in the conclusion reached by Mr. Harkness, that the definition of common carriers contained in section 2 of the act is meant to exclude all common carriers not therein specifically designated. The word "includes" might be held to extend the definition and not limit it; but taking into consideration all the other provisions of the act, together with the apparent use

lessness of this designation unless it is meant to enumerate the kinds of common carriers who are subject to the provisions of the act, I have reached the conclusion that the word "common carrier" is so limited.

In this connection I wish to call your attention to the fact that pipe line companies were originally enumerated within the agencies included in the term "common carrier," but were subsequently stricken out before the bill was enacted into law. This is indicative of an intention on the part of the Legislature to exclude all agencies except those therein enumerated.

I also herewith transmit to you a letter which I have received from Mr. Stevens, the chairman of the Commission for the second district. He suggests that if the question of the meaning of the word "common carrier" comes before your Commission, that we communicate with the Commission for the second district before reaching a final decision, and I would suggest that such a communication be made.

Yours very truly,

ABEL E. BLACKMAR,

Counsel to the Commission.

November 7, 1907.

Hon. ABEL E. BLACKMAR, *Counsel to the Public Service Commission for the First District:*

MY DEAR SIR.— I desire to report upon the question of the jurisdiction of the Commissions raised by the letter of Mr. Frank Rutherford, secretary of the Raritan Bay Park Association, of 6th September, in which he complains that the refusal of the municipal authorities of the city of New York to grant the application of certain residents of Richmond borough to have the municipal ferry, running from the battery in the borough of Manhattan to St. George in the borough of Richmond, check and carry the baggage of passengers and to provide facilities therefor, at its terminals, works a great hardship upon such residents, and requests this Commission to take action thereon. On receipt of such letter Commissioner McCarroll orally asked you whether in your opinion the Commissions have jurisdiction over ferries and ferry companies.

The Public Service Commissions Law, in its second section, defines the more important terms with which it deals and provides:

> "§ 25. *Application of Article.*—The provisions of this article (Article II) shall apply to the transportation of passengers, freight or property, from one point to another within the State of New York, and to any common carrier performing such service."

Although in some parts of the act words other than "common carrier" are used (as in paragraph 26, which requires "every corporation, person or common carrier" performing a service designated in paragraph 25, to furnish adequate service), I take it to be plain that the operation of that article, and therefore of the act, so far as it affects common carriers, is controlled by the definition of common carrier in section 2, which is:

> "The term 'common carrier,' when used in this act, *includes* all railroad corporations, street railroad corporations, express companies, car

companies, sleeping car companies, freight companies, freight line companies and all persons and associations of persons, whether incorporated or not, operating such agencies for public use in the conveyance of persons or property within this state."

As the words "ferry companies" are not contained in the enumeration in the definition quoted, this entire question resolves itself into one of the construction of the meaning of the word "includes" and its importance is at once made manifest when we consider that upon it depends the question whether the jurisdiction of the Commissions is limited to the carriers enumerated or whether it comprises, in addition thereto, all common carriers engaged in the "transportation of passengers, freight or property" within this State — not ferry companies alone, but navigation companies, towing companies operating on the canals and waterways of the State, and the many other agencies engaged in such transportation.

As to ferries being common carriers, their position as such has long been well recognized, as appears from the quotation from Lord Hale's *de Jure Maris*, cited with approval in *Munn* v. *Illinois*. In this treatise, written over 200 years ago, Lord Hale said, in speaking of ferries, that the king had

> "a right of franchise or privilege, that no man may set up a common ferry for all passengers without a prescription time out of mind or a charter from the king. He may make a ferry for his own use or the use of his family, but not for the common use of all the king's subjects passing that way; because it doth in consequence tend to a common charge, and has become a thing of public interest and use, and every man for his passage pays a toll, which is a common charge, and every ferry ought to be under a public regulation, viz., that it give attendance at due times, keep a boat in due order and take but reasonable toll; for if he fail in these he is finable."

Webster's Dictionary defines the word "includes" to mean:

> "Latin, *in*, and *cludere*, to shut.
>
> "1. To confine within; to hold; to contain; to shut up; as the shell of a nut includes the kernel.
>
> "2. To comprehend, as a genus the species, the whole a part, an argument or reason the inference; to contain; to embrace; to relate to; to pertain to."

The second part of this definition gives the sense of the word so often adopted by the courts under the *ejusdem generis* rule, that is, where a number of things of a certain character are enumerated after such a word as includes there is embraced therein not only those specified, but all others of a like character and forming part of the same class.

As commonly used, I think the word "includes" is understood in this sense, and as said by Judge Hatch in *Matter of Goetz*, 71 App. Div. 272, at page 275:

> "'Including' is not a word of limitation, rather is it a word of enlargement, and in ordinary signification implies that something else has been given beyond the general language which precedes it."

The meaning of this word has received extensive consideration in the English courts, and in one of the most interesting cases on the subject (*Jones* v. *Cook*, L. R. 6 Q. B. 505), despite the fact that the case was a criminal one, ordinarily requiring a strict construction of the act, the court gave to the word "includes" its broader significance. The head note to the case concisely states the facts:

> *Head Note.*—"By the Petroleum Act, 1862, S. 1, 'petroleum' for the purposes of this act shall include any product thereof that gives off an inflammable vapour at a temperature of less than 100 degrees Fahrenheit. By the Petroleum Acts, 1862 and 1868, 'petroleum' shall include all such rock oil, Rangoon oil, Burmah oil, any product of them, and any oil made from petroleum, coal, schist, shale, peat or other bituminous substance, as gives off an inflammable vapour at a temperature of less than 100 degrees Fahrenheit: *Held*, that all petroleum proper, whether giving off an inflammable vapour at under 100 degrees or not, was within the acts; and that, therefore, the keeping of any petroleum proper, otherwise than for private use, within fifty yards of a dwelling or storehouse, without a license, was prohibited by S. 4 of the Act of 1868.
>
> "Blackburn, J., at page 509:
>
> "Taking the intention of the Legislature to be shown by the words used in the acts, I think that the magistrates were right, and that the conviction must be affirmed. There were two petroleum acts passed; the one enacted, whereas it was necessary to provide for the safekeeping of petroleum, and certain products that are dangerous, that 'petroleum shall include any product thereof that gives off an inflammable vapour at a temperature of less than 100 degrees.' That means that petroleum shall mean petroleum, and also include that which might not otherwise be considered as petroleum, viz., products derived from petroleum, provided those products be of such a nature that they give off those inflammable vapours. Thus throughout the act 'petroleum' is to be used and considered as including such products as give off an inflammable vapour at a temperature of less than 100 degrees."

To the same effect are *Queen* v. *Kershaw* (Queens Bench), 6 El. & Bl. 999; *Ex parte Ferguson*, L. R. 6 Q. B. 280; and *Pound* v. *Plumstead Board of Works*, L. R. 7 Q. B. 183.

An interesting and instructive sidelight on this general meaning of the word is furnished by a consideration of the other definitions in section 2 of the act. It is significant that when the meaning of the word defined must, from the nature of the subject matter, be limited, the word used is "means," as "The term Commissioner when used in this act *means* one of the members of such Commission;" but in all other cases recourse is had to the word "includes," as, for example, the word "railroad," as defined, includes various agencies, but the list given in the definition is by no means complete, for omitted therefrom are many instrumentalities in the operation of a railroad. It uses the words "bridges, ferries, tunnels, switches, subways, tracks, stations and terminal facilities," but does not, for instance, specify block signal systems, ties, ballast, roadbed, etc., which from their very nature are important component parts of a railroad and over which supervision is necessary to render regulations by the Commissions effective. It is, of course,

unreasonable to suppose that a railroad company would be permitted to say in answer to an order of one of the Commissions to make certain repairs to its roadbed, that such an order was not binding because a railroad, as defined in the act, does not include its own roadbed. Here it is obvious that the word "includes" is not one of limitation.

The reference to ferries in the definition of railroad is applicable only to railroad ferries, but there is this point to be noted in passing, that if ferries were intended to be embraced in the definition of common carrier, there would be no necessity for including them in the definition of railroad.

This meaning, however, is not absolutely controlling, but is further dependent upon the intention of the Legislature to be gleaned from the context of the act, as was stated in effect in the opinion in *Calhoun* v. *Memphis and Paducah R. R. Co.*, 2 Flippen (U. S. Circuit Court) 442, where the court was called on to construe the language of a railroad mortgage. In that opinion, at page 445, it is said that:

> "The word 'railroad' as used here may mean railroad company as it usually does. Ordinarily, this general description would be controlled by the subsequent enumeration contained in the words 'All depots, warehouses and structures' * * * But when this rule of construction is relied on, it will be generally found that the particulars are introduced with a *videlicet* or some such manifestation of the intention to restrain the general description. (Bouv. Dict. words '*videlicet*,' '*scilicet*.') *And the ejusdem generis rule of construction always yields to the intention to be gathered from the context and general scope of the whole instrument.* * * * Here the particulars are introduced by the word 'including' which does not indicate a restrictive intention, but the contrary."

A good illustration of the rule is afforded by the Interstate Commerce Act which, as it existed prior to the amendment of 1906, by its terms applied only to railroad companies, but was then amended by the insertion of a provision that the word common carrier as used in that act should "include express companies and sleeping car companies." There, from the circumstances attending its insertion and the context of the act, the intention of the Congress was plain to merely extend the jurisdiction of the Interstate Commerce Commission over the two classes of carriers specified.

Assuming, therefore, as I think is proper, that the usual meaning of the word "includes" as given above is correct, it then remains to carefully scrutinize the act to see to what extent, if at all, such a meaning is inconsistent with, or limited by, its other provisions, or whether from the entire context the inference can *fairly and reasonably* be drawn that the Legislature intended to place such classes of common carriers as ferries within the jurisdiction of the Commissions.

An analysis of the definition in section 2 shows that of the seven classes of carriers referred to, one comprises express companies and the other six distinctively railroad agencies, all of which are probably the best known examples of common carriers, and whose character as such is unquestioned. The question immediately occurs, what is the purpose of specifying these well recognized carriers, if not one of enumeration of carriers subject to the provisions of the act. If the definition had contained some carriers whose character as such would otherwise be open to doubt, or contained but a short

and incomplete list, it would indicate that all well recognized common carriers were embraced therein plus the doubtful ones; but here there are no doubtful ones and the list is full and complete in reference to the great class of carriers to cover which the legislation was desired. If, however, we give the word "include" its broader meaning, it would be equivalent to construing the definition to mean that the word common carrier, as used in the act, shall include common carriers, a definition that does not define and a construction that would violate the rule that effect is to be given so far as possible to all parts of the act. We must assume that the Legislature understood the meaning of the words it used, and, to my mind, when it followed a broad term with but a small number of well recognized parts, it narrowed instead of extended the broad term. This definition differs from that of railroads, to which I have referred for purposes of illustration, in that a railroad as generally understood is a unit made up of many component and inseparable parts, while the term "common carrier" is a comprehensive one embracing a large number of separate and distinct units. While this reasoning may not be absolutely controlling on this question, it throws a heavier burden on the context of the act to evidence an intention to include carriers other than those specified in the definition.

Turning to the act, we find that it is divided into five articles, of which Article I contains definitions and general provisions regarding the organization and procedure of the Commissions; Article II, provisions relating to the duties of railroads, street railroads and common carriers; Article III, provisions relating to the powers of the Commissions over common carriers, railroads and street railroads; Article IV, provisions relating to gas and electric corporations, and Article V, provisions abolishing other boards and devolving their powers upon the Commissions. Of these the only ones affecting this question, outside of the definitions quoted above, are Articles II and III. As ferries were not subject to the jurisdiction of the Board of Railroad Commissioners, the Commissions cannot acquire jurisdiction through their succession to the powers of that board. (See Transportation Corporation Law, paragraphs 2–6, inclusive.)

Articles II and III, for the purposes of considering this question, may be subdivided as follows:

ARTICLE II.
(Duties of Common Carriers.)

1. Application of Article, § 25.
2. Adequacy of Service, §§ 26, 27.
3. Rates, §§ 28–34, inclusive, § 36.
4. Discrimination, §§ 35, 37, 39.
5. Liability, §§ 38, 40.

ARTICLE III.
(Powers of Commissions.)

a. General Powers of Commissions, § 45.
b. Reports of Common Carriers, § 46.
c. Investigations, §§ 47, 48.
d. Power to Fix Rates, Order Changes, etc., §§ 49, 50, 51.
e. Uniform System of Accounts, § 52.
f. Franchises, Stock and Bond Issues, §§ 53, 54, 55,
g. Penalties and Proceedings, §§ 56, 57, 58, 59,
h, Interstate Traffic, § 60,

ARTICLE II.

(1) *Application of Article.*

Section 25 should be read in connection with the short title of the act in section 1, which provides:

> "This chapter shall be known as the Public Service Commissions Law, *and shall apply to the public services herein described,* and to the commissions hereby created."

It is plain, I think, that the word "services" refers to the act of service rendered and not to the agency rendering it, but should there be any doubt on this point, it is made clear by a reference to section 25, which is as follows:

> "The provisions of this article shall apply to the transportation of passengers, freight or property, from one point to another within the State of New York, and to any common carrier performing such service."

These sections are both jurisdictional and are of the utmost importance in considering this question, for it will be noted that by section 1 the act is to apply to the public services described in it, and section 25 describes those services in language sweeping enough to embrace all carriers and unless this wide jurisdiction, unlimited as to kind or class of common carrier, is controlled by the definition in section 2, I think the Commissions' power to regulate all such agencies would not be open to serious dispute. These sections afford substantial basis for the argument that the intention, as drawn from the act, was to grant in general terms jurisdiction over *all* common carriers and that the provisions for details of regulation do not affect such jurisdiction, but merely make clearer the powers of the Commissions over certain carriers. But if this be so, what is the function of the definition in section 2? It must be assumed that it was inserted for some purpose and our inquiry comes back again to a consideration of how far, if at all, the sweeping jurisdiction granted by these sections is limited by the word "includes" in the definition, as itself affected by the context of the act.

(2) *Adequate Service.*

Section 26 is just as broad and requires that common carriers

> "shall furnish * * * such service and facilities as shall be safe and adequate and in all respects just and reasonable"

and that

> "All charges * * * shall be just and reasonable and not more than allowed by law or by order of the commission."

But it will be noted, as evidencing the intention, that when the Legislature came to providing for a detail of such adequate service, it concerned itself only with railroads, as section 27 provides that

"A railroad corporation, upon * * * application * * * shall construct * * * switch connections * * * with a lateral line of railroad or private side-tracks * * *."

This limitation of detail is further found in subdivision *d* of Article III, which will be referred to in its order.

(3) *Rates.*

Here is an instance of where the language intended to cover other carriers is so colored by the prominence of the necessity for railroad regulation as to seem restricted to it. The word common carrier is used, but provision for details is almost exclusively applicable to railroads; although, by the definition of common carrier referred to above, express companies must be affected as well.

Section 28 requires that

"Every common carrier shall file * * * schedules showing the rates * * * for the transportation of passengers and property within the State between *each point upon its route* and all other points thereon; and between each point upon its route and all *points upon every route leased, operated or controlled by it;* and between each point on its route or upon any route leased, operated or controlled by it and all points upon the route of any other common carrier, whenever a *through route and joint rate* shall have been established or ordered between any two such points * * *."

Strictly speaking, there are no routes "leased, operated or controlled" by a ferry company, or, for that matter, by an express company, and the words "through route and joint rate" are more usual as applied to railroads, but between an express company and a ferry company there is this important distinction, that these provisions apply to express companies, unsuited though the language may be for the purpose, because they are expressly made subject to the act, while in the case of ferry companies, if they be so subject, they are made so by construction. Though these words in section 28 have a truer application to railroads, they might include ferry companies in the absence of other inconsistent provisions in other parts of the act, but this is to be noted as one of the indications of intention and taken into consideration with all other provisions, one way or the other, in summing up the evidence of legislative intention.

Section 29, providing for changes in schedules "filed and published by a common carrier."

Section 30, paragraph 1, that

"The names of the several carriers which are parties to any joint tariff shall be specified therein, and" (the carriers) * * * "shall file with the Commission such evidence of concurrence * * * as may be required * * *."

Paragraph 2, that

"Every common carrier shall file * * * sworn copies of every contract * * * with any other common carrier * * *;"

Section 31, that

> "No common carrier shall * * * by any special rate, rebate, drawback, or other device or method, charge, demand, collect or receive from any person * * * a greater or less compensation for any service * * *, in the transportation of passengers, freight or property * * * than it charges, demands, collects or receives from any other person * * * for doing a like and contemporaneous service * * *."

Section 32, that

> "No common carrier shall make or give any undue or unreasonable preference or advantage to any person or corporation or to any locality or to any particular description of traffic * * *."

and that portion of section 33 providing that

> "No common carrier * * * shall after the first day of November, nineteen hundred and seven, engage or participate in the transportation of passengers, freight or property * * * until its schedules * * * shall have been filed."

and that

> "No common carrier * * * shall, directly or indirectly, issue or give any free ticket, free pass or free transportation for passengers or property * * *."

are all comprehensive enough to cover ferry and navigation companies. Section 32 then goes on to provide that the prohibition against giving free transportation shall not apply to

> "employees of * * * telegraph and telephone companies doing business along the line of the issuing carrier."

which is necessarily restricted to railroad companies, as is the second paragraph of section 33, permitting the issuance of mileage tickets, for although it is entirely feasible for navigation companies to issue these tickets, such is not the practice.

The language of the remaining sections of this subdivision providing (section 34) that

> "No common carrier * * * shall * * * suffer * * * any person * * * to obtain transportation * * * at less than the rates then established * * * by means of false billing, false classification, false weight or weighing, or false report of weight, or by any other device or means."

and section 36, that

> "No common carrier, subject to the provisions of this act, shall charge or receive any greater compensation in the aggregate for the transportation of passengers or of a like kind of property, under substantially similar circumstances and conditions, for a shorter than for a longer distance over the same line in the same direction, the shorter being in-

> cluded within the longer distance; but this shall not be construed as authorizing any such common carrier to charge and receive as great a compensation for a shorter as for a longer distance or haul."

would perhaps be applicable to ferry companies, although the entire language, and especially the word "haul" in the last line of section 36, has a truer application to railroads.

(4) *Discrimination.*

In this subdivision begins to appear a stricter limitation of detail to railroads.

Section 35 provides:

> "Every common carrier is required to afford all reasonable, proper and equal facilities for the interchange of passenger, freight and property traffic between the lines owned * * * by it and the lines of every other common carrier."

The word "lines" as usually understood might apply to lines of steamboats or ferries, but further on in this section it is provided that it

> "shall not be construed to require a *common carrier* to permit or allow any other *common carrier* to use its *tracks* or terminal facilities. Every *common carrier*, as such, is required to receive from every other common carrier, at a connecting point, *freight cars* of proper standard, and *haul* the same through to destination * * *."

A navigation company could clearly not comply with this detail, for the act uses the word tracks and requires the carrier to *haul* the freight cars through to destination and although there might be ferries that could be used as railroad connections, the language is not natural to such a case, and in addition, ferries of that character would be owned by a railroad company and embraced in the definition of a railroad referred to above. This limitation is even more pronounced in section 37, requiring that

> "Every railroad corporation or other common carrier engaged in the transportation of freight shall * * * furnish to all persons * * * sufficient and suitable *cars* for the transportation of such *freight in car load lots.*"

which is manifestly inapplicable to carriers other than railroads.

Section 39, providing that

> "No common carrier shall enter into * * * any combination * * * to prevent * * * the carriage of freight and property from being continuous * * *."

Although drawn expressly to cover railroad companies might apply as well to navigation or freight companies, but not the further provision that

> "No *breakage of bulk*, stoppage or interruption of carriage, made by any common carrier, shall prevent the carriage of freight and property from being treated as one continuous carriage."

(5) *Liability.*

Section 38 requires that

> "Every common carrier and every railroad corporation and street railroad corporation * * * issue either a receipt or bill of lading * * *."

and provides for liability thereunder. There is nothing in this section which could not be operative as against ferry companies nor is there in section 40, which provides for a recovery of damages arising from a violation of any provisions of the act, if indeed ferry companies are subject to such provisions.

ARTICLE III.

(*a*) *General Powers of Commissions.*

(*b*) *Reports of Common Carriers.*

Section 45. The first paragraph deals with the powers of the Commissioners to administer oaths and summon witnesses and does not affect the question.

Paragraph 2 provides that

> "Each commission shall have the general supervision of all common carriers, railroads, street railroads, railroad corporations and street railroad corporations within its jurisdiction as hereinbefore defined, and shall have power to and shall examine the same and keep informed as to their general condition, their capitalization, their franchises and the manner in which *their lines, owned, leased, controlled or operated* are managed, conducted and operated, not only with respect to the adequacy, security and accommodation afforded by their service, but also with respect to their compliance with all provisions of law, orders of the commission and charter requirements."

The words "lines owned, leased, controlled or operated" are inartificial as applied to ferries which have routes but not lines which could be owned, leased, controlled or operated in the usual sense of those terms.

Paragraphs 2 and 3, authorizing the Commission to examine all books and papers, and providing for hearings by the Commission relating to proposed changes in the law relating to any common carrier, railroad corporation or street railroad corporation, are comprehensive enough to cover all classes of carriers, as is also section 46, providing for the making of reports by common carriers, railroad and street railroad corporations.

(*c*) *Investigations.*

Section 47 provides that

> "Each Commission shall investigate the cause of all accidents *on any railroad or street railroad within its district* * * *. Every common carrier, railroad corporation and street railroad corporation is hereby required to give immediate notice to the Commission of every accident happening *upon any line of railroad or street railroad* owned, operated, controlled or leased by it * * *."

This is probably as clear an illustration as appears in the act of the limitation of details to railroads. It might, of course, be argued that the general provisions cover all carriers and that this detail is only intended to make more clear its application to one class of carriers, and if the word ferries had occurred in the definition this would probably be so; but here we are endeavoring to ascertain intent and it would seem only reasonable to suppose that if the Legislature had ferries in mind, it would have drawn a section like this one to cover them, for accidents to ferries and steamboats are usually more serious and fraught with even a larger loss of life than in the case of railroads. Paragraph one of the concluding section (48) of this subdivision, providing that

> "Each Commission may * * * investigate * * * any act or thing done or omitted to be done by any common carrier, railroad corporation or street railroad corporation, subject to its supervision"

and that

> "The Commission must make such inquiry in regard to any act or thing done or omitted to be done by any such common carrier, railroad corporation or street railroad corporation in violation of any provision of law or in violation of any order of the Commission."

is broad enough to cover any common carrier, as is also paragraphs 2 and 3, providing for the procedure to be followed on the filing of a complaint and authorizing the Commission, after investigation, to make the necessary orders.

(*d*) *Power to Fix Rates, Order Changes, Etc.*

Section 49 provides:

> "Whenever either Commission shall be of opinion, after a hearing, upon a complaint made as provided in this act, that the rates, fares or charges * * * collected by any common carrier, railroad corporation or street railroad corporation subject to its jurisdiction * * * are unjust * * * or in any wise in violation of any provision of law, the Commission shall determine the just and reasonable rates * * * and shall fix the same by order to be served upon all common carriers, railroad corporations or street railroad corporations by whom such rates, fares and charges are thereafter to be observed."

This is broad enough and so is the further provision authorizing the Commission to require any common carrier, railroad corporation or street railroad corporation to accord adequate facilities, but the section then goes on to provide that

> "The Commission shall have power by order to require any two or more *common carriers* or railroad corporations *whose lines*, owned, operated, controlled or leased, form a *continuous line* of transportation or could be made to do so by the construction and maintenance of *switch connection*, to establish through routes and joint rates."

Although this language of this last part of the section might cover the case of traffic connection between a railroad and a ferry or steamboat, the presumption is against it and also against such a construction of section 50, which authorizes the Commission to require

> "repairs or improvements to or changes in any *tracks, switches*, terminals or terminal facilities, *motive power*, or any other property or device used by any common carrier, railroad corporation or street railroad corporation."

Section 51 provides that

> "If, in the judgment of the Commission having jurisdiction, *any railroad corporation or street railroad corporation* does not run trains enough or cars enough or possess or operate motive power enough, reasonably to accommodate the traffic, passenger and freight, transported by or offered for transportation to it, or does not run its *trains or cars* with sufficient frequency * * * the Commission shall * * * have power to make an order directing any such railroad corporation or street railroad corporation to increase the number of its *trains or of its cars*," etc.

This section is most significant, for here the Legislature is itself dealing with transportation appliances used by the carriers subject to the act, and it is hardly open to doubt that if the Legislature had the regulation of ferries in mind it would have applied such an important provision to them by some reference to boats, etc., and not left it exclusively applicable to railroads.

(*e*) *Uniform Systems of Accounts.*

The portion of section 52 which authorizes the Commission to

> "establish a uniform system of accounts to be used by railroad and street railroad corporations or other common carriers * * * and prescribe the forms of accounts, records and memoranda * * * of the movement of traffic, as well as receipts and expenditures of money."

would apply to all common carriers, but not the latter part of the section, which provides that

> "The Commission shall at all times have access to all accounts, records and memoranda *kept by railroad and street railroad corporations* and may prescribe the accounts in which particular outlays and receipts shall be entered * * *."

So that it would seem that the Commission may establish a uniform system of accounts for all carriers, but can only examine the books of railroads.

(*f*) *Franchise, Stock and Bond Issues.*

Section 53 providing that

> "Without first having obtained the permission and approval of the proper commission no railroad corporation, street railroad corporation or common carrier shall begin *the construction of a railroad or street railroad*, or any extension thereof * * *."

is restricted exclusively to railroad corporations, and the same is true of the first paragraph of section 54 which provides that

> "No franchise * * * to own or operate a *railroad or street railroad* shall be assigned, transferred or leased * * * unless * * * approved by the proper commission * * *."

The second paragraph provides that

> "No *railroad corporation, or street railroad corporation* * * * shall hereafter purchase * * * any part of the capital stock of any *railroad corporation or street railroad corporation or other common carrier* * * * unless authorized so to do by the Commission * * * and * * * no stock corporation * * * shall purchase * * * more than ten per centum of the total capital stock issued by *any railroad corporation or street railroad corporation or* other common carrier."

This prohibition against acquiring any of the stock of a common carrier seemingly applies only to railroad companies, except in the case of stock corporations acquiring more than 10 per cent. of the stock of a common carrier.

The concluding section of this subdivision is broad enough to cover all carriers and provides that

> § 55. "A *common carrier*, railroad corporation or street railroad corporation * * * may issue * * * evidence of indebtedness payable at periods of more than twelve months * * * when necessary for the acquisition of property * * * provided and not otherwise that there shall have been secured from the proper commission an order authorizing such issue * * *. Such *common carrier*, railroad corporation or street railroad corporation may issue notes * * * payable at periods of not more than twelve months without such consent * * *."

(*g*) *Penalties and Proceedings.*

These provisions are broad enough to cover all carriers, if they come within the other provisions of the act, and do not require extended quotation or discussion.

(*h*) *Interstate Traffic.*

This is applicable to railroads alone, since the Commission is only authorized to "investigate freight rates on interstate traffic on railroads within the State."

Summary and Conclusion.

The analysis of the act in the foregoing pages shows that the plan upon which the act was drawn contemplated very broad sections in providing for the general powers of the Commissions, and then other sections, also broadly drawn, providing for details of transportation. Broad as these provisions are, it will be noted that nowhere in the act is there any language having a special application to ferry companies. Taking up the most important subjects with which the act deals, we find that under adequacy of service, so far as details

are concerned, the duty placed upon a carrier is in certain cases to provide switches, and the Commissions are empowered to require connections between carriers by switches; to require repairs or improvements in tracks, switches, terminal facilities and motive power, and to require railroad corporations to run more trains or cars. In the almost equally important matter of rates, although more general in its scope, the language is more applicable to railroads, especially the details such as those in regard to mileage tickets and joint rates. In regard to discrimination connecting carriers are required to receive "freight cars" and "haul" the same; carriers are required to provide sufficient "cars" for "freight in car-load lots" and the provision for "continuous carriage" and "breakage in bulk" relate to evils common to railroads. In the matter of investigations, the authority of the Commissions is generally unrestricted, but in the provision for the investigation of accidents the only accidents provided for are those happening on railroads. In the provision for uniform system of accounts, although the Commission is empowered to establish a uniform system of accounts for common carriers, its right of access to accounts is seemingly restricted to those of railroads, and finally in the matter of approval of franchises and stock and bond issues the only franchise needing approval is one to build a railroad or an extension thereof. The approval of the Commission is necessary only to the transfer of a railroad franchise and the prohibition against a corporation acquiring any stock in a common carrier corporation without the Commission's approval extends only to railroad corporations.

The inquiry is pertinent — if the necessity for the regulation of water transportation existed, why did the Legislature in all the important respects referred to confine its attention to railroads when a slight change of phraseology would have embraced these other classes of carriers?

An important and significant fact to consider as evidencing legislative intention is the treatment of the question of placing pipe line companies within the jurisdiction of the Commission. In the act as originally introduced, these companies were included in the definition of common carrier, but before the act reached final passage they were stricken therefrom. What other view can be tenable but that the Legislature considered that this act was limited in its effect to the carriers enumerated? To take any other view would be to place pipe line companies again within the purview of the act or to omit them for some illogical reason, while at the same time retaining such carriers as ferry and navigation companies.

Sections 1 and 25, to which I have already referred, at some length, do furnish a basis for the argument that the general provisions, such as section 25, empower the Commissions to regulate all common carriers, and that the provisions for detail are not intended to limit the broad jurisdiction, but are intended merely to make more clear its application to certain carriers; but the primary rule of construction is to ascertain the legislative intent, and I do not think that the act, taken as a whole, authorizes such a broad and sweeping construction, but on the contrary it seems to me that the Legislature, by its application of this legislation to the details referred to, clearly showed that the general language was to be restricted to the carriers specifically named in such definition. It is by this construction alone that we can reconcile the action of the Legislature in striking from the definition the words "pipe line companies."

Although the fact that the problem of railroad regulation was the most pressing, and, therefore, most prominent in the minds of the framers of the act, and that this prominence necessarily colored the language used throughout, whether intended to apply to railroads alone or to other common carriers, such as express companies as well, and although probably no one of the limitations of detail to railroads would of itself warrant the conclusion, yet it is my opinion that their totality, together with the form of the definition and the action of the Legislature in regard to pipe line companies and all other considerations to which I have referred, evidences the intention on the part of the Legislature to confine its action to the classes of carriers specifically named in the definition.

In construing this act it must also be borne in mind that legislation of this character marks a wide departure from American ideals of government upon which the theory of the Jeffersonian school, of as little government as possible, has had a wide and lasting effect, and that where this departure is made to meet the complexities of modern transportation and industrial conditions, the courts are bound to carefully examine the basis for the wide powers exercised by the Commissions, and where any enlargement of such powers is claimed, it must rest on a clear and stable basis.

The fact that carriers engaged in transportation on navigable waters come within the admiralty jurisdiction of the Federal courts, and that provision for them might give rise to embarrassing complications, may or may not have influenced the Legislature in this regard.

In conclusion, this view is further borne out by a consideration of this question in its broader or political aspect. The problem of railroad regulation has since and even prior to the enactment of the first Interstate Commerce Act in the late eighties, been a matter of vital importance to the country at large and especially during the last six or eight years — has occupied probably the most prominent place in American politics; but at no time during the campaign to secure this legislation, in which the entire subject of transportation was thoroughly discussed in all its bearings, has there been, to my knowledge, any agitation for the regulation of water transportation; nor is it covered by the Interstate Commerce Act, upon which the Public Service Commissions Law is so largely modeled, save where those agencies are operated in conjunction with railroads. In this State, during the gubernatorial campaign preceding the enactment of this legislation, in which the discussion of these questions was widespread, there were no abuses in the management of ferry or navigation companies brought to light and there was no public demand for legislation affecting them, nor was there any reference to them in the Governor's message, pursuant to the recommendation of which this law was passed. Regulation for railroads and all carriers connected with them in any way, and of gas and electric corporations, was demanded and was granted, but there was no such demand in the case of ferry companies, and in the public mind the necessity for their regulation did not exist.

I, therefore, beg to report that in my opinion the Commission is without jurisdiction over ferries, and has, therefore, no power to act upon the complaint referred to.

Very truly yours,
(Signed) LE ROY T. HARKNESS,
Assistant Counsel.

RATES — ELECTRICITY — FIXING OF — COMPLAINTS — PUBLIC SERVICE COMMISSIONS LAW, SECTIONS 66, 71.

November 14, 1907.

Hon. MILO R. MALTBIE, *Commissioner, Public Service Commission for the First District:*

DEAR SIR.— You have asked me to advise whether in my opinion it would be desirable to extend the inquiry as to the reasonableness of the rates of electric lighting companies to the county of Kings, or as I understood it to the whole of the territory of the first district, and whether it would not be advisable to proceed upon our own motion instead of upon the complaint filed by outside parties.

The Merchants' Association proposed to make a complaint against the Edison Electric Lighting Company alone respecting its service and price for electricity, but as the law requires that this Commission shall prescribe the form of the complaint, the matter was referred to me. I advised that the complaint be made against all companies serving under the same conditions in the same territory, in order that any question of the legality of the different rates for different companies who are operating in the same territory under the same conditions might be avoided.

There has recently been a decision of a district judge in California to the effect that it is competent for a municipality authorized to fix telephone rates to prescribe different rates for different companies. However, the Supreme Court, in a recent case has raised this question as one of importance, but has not yet answered it, because the decision of that case did not require its answer. The more I consider the question the firmer I am grounded in my opinion that in the case where different gas or electrical corporations are serving the same territory under the same general conditions, the rate prescribed must be uniform for all. This principle does not necessarily apply to railroads and street railroad corporations.

It is primarily a question of policy whether we should extend the present complaint to embrace Kings county or not. Chapter 732 of the Laws of 1905, which prescribes the maximum rate for electricity, provides that the rate shall be ten cents per kilowatt hour in the city of New York except in the fifth ward of the borough of Queens, and also except that there may be charged twelve cents per kilowatt hour in Kings county. The present maximum rate in Kings county is, therefore, different from that in Manhattan and Bronx. As the Legislature has recognized that different conditions prevail in these different boroughs, and, therefore, that a different rate may be fixed for each, I see no reason for requiring a complainant to include in one complaint the service in these two counties. No criticism can be made of the Commission for considering Manhattan borough first if the complaint is made by an outside party.

The question whether this Commission has power to fix a maximum rate upon a hearing or investigation made upon its own motion, is a more difficult one. My first impression was that such proceedings could be instituted either by complaint or upon the motion of the Commission. Further thought has created a doubt on this point. In article III of the Public Service Commis-

sions Law, which contains provisions relative to the powers of the Commissions in respect to common carriers, railroads and street railroads, no order can be issued affecting rates except upon a complaint made by third parties. The presumption would be that the same practice in this respect would also apply to rates of gas and electrical corporations, and such was the case in the old Gas and Electric Commission Law, chapter 736 of the Laws of 1905. The Gas Commission had no power to fix rates except upon the proceedings instituted by the complaint of outside parties. In cities of the first class complaints as to price must be signed by one hundred customers or purchasers (section 71). The object of this provision seems to me to prevent an inquiry as to price unless there is official or general dissatisfaction with it. The law also provides elaborate means for carrying on an investigation instituted on such complaint and there would be no doubt about the question that the complaint must be made by third parties except for one sentence which was incorporated in section 71, which is in other respects taken almost verbatim from the old Gas and Electric Commission Law.

The sentence is as follows:

> "If an investigation be instituted upon the motion of the Commission the person or corporation affected by the investigation may be permitted to appear before the Commission at a time and place specified in the notice and answer all charges which may be preferred by the Commission."

This clause inserted in the midst of the section regulating the method of proceeding upon a complaint would seem to refer to this same subject matter, namely, the regulation of price of gas and electricity; but as section 71 limits the causes of complaints filed by third persons to "either the illuminating power, purity or price of gas, or the initial efficiency of the electric incandescent lamp supply, or the regulation of the voltage of the supply system used for incandescent lighting or price of electricity sold and delivered in such municipality," and as there are other causes of complaint suggested by section 66 of the law, it may still be that the clause above quoted refers to investigations instituted by the Commission under section 66, which may involve other subjects than the price of gas and electricity. If this clause occurred in any other section than section 71, we should not doubt this fact. In my opinion, therefore, the safe construction is that the action of the Commission in determining the initial efficiency of the electric incandescent lamp supply or the regulation of the voltage of the supply system, or the price of electricity sold, is limited to cases where complaints are filed as provided in section 71, but orders of any other character may be issued upon proceedings instituted by the Commission itself.

If the Commission thought that the price of electricity should be investigated and no person was ready to file a complaint, I would advise that jurisdiction be assumed on the motion of the Commission and the question tested in the courts; but so long as other parties stand ready to file the complaint, I believe that the Commission should not act on its own initiation.

I am sending a communication to the Commission suggesting a form of complaint.

Yours very truly,

ABEL E. BLACKMAR,

Counsel to the Commission.

FREE TRANSPORTATION PROHIBITED — PUBLIC SERVICE COMMISSIONS LAW — SECTIONS 15, 33, EXCEPT UNDER CONTRACTS FOR RAPID TRANSIT RAILWAYS IN NEW YORK CITY.

November 14, 1907.

TRAVIS H. WHITNEY, Esq., *Secretary, Public Service Commission for the First District:*

DEAR SIR.— I am in receipt of your letter of November 12, asking advice as to transit inspectors and other agents of the Commission entering upon or riding upon trains or cars of the Interborough Company in the subway, and of other companies, without paying fare.

It is provided by the Public Service Commissions Law, section 15, that every Commissioner, counsel to the Commission, secretary thereof, and every person employed or appointed to office by the Commission or by counsel to the Commission shall be and be deemed to be a public officer; railroad companies and their officers are forbidden to offer or to give to any Commissioner, counsel to the Commission, secretary or any officer employed or appointed to office by the Commission or by counsel to the Commission, any free pass or transportation or any reduction in fare to which the public generally are not entitled; and it is provided that if any Commissioner, counsel, secretary or person employed or appointed to office by the Commission or counsel to the Commission shall violate any provision of this section (15) he shall be removed from the office held by him.

It is provided by the Constitution of the State of New York (article XIII, section 5) that no public officer or person elected or appointed to a public office under the laws of the State shall directly or indirectly ask, demand, accept, receive or consent to receive for his own use or benefit or for the use or benefit of another any free pass or free transportation from any person or corporation or make use of the same himself or in conjunction with another. A person who violates any provision of this section shall be deemed guilty of a misdemeanor and shall forfeit his office on the suit of the Attorney-General.

It is provided by the Penal Code, section 417, as follows:

> "Any railroad commissioner or any secretary, clerk, agent, expert or other person employed by the board of railroad commissioners who * * *
>
> "2. Accepts, receives or requests, either for himself or for any other person any pass from any railroad corporation * * * is guilty of a misdemeanor."

It was provided by section 109 of the Railroad Law, now repealed, as follows:

> "In the discharge of their official duties the commissioners, their officers, clerks and all experts and agents, whose services are deemed temporarily of importance, shall be transported over the railroads in this State free of charge upon passes signed by the Secretary of State."

Under the provisions of this section it was held that the above (article XIII, section 5 of the Constitution) did not prohibit the Railroad Commis-

sioners, their clerks, agents and experts from accepting and using passes issued by the Secretary of State for their transportation while engaged in public business. (See *Matter of Railroad Commissioners*, 11 Misc. 103.)

The Public Service Commission for the first district has succeeded to the powers and duties of the Board of Railroad Commissioners within specified territory; but the scheme provided by the Railroad Law for carrying the expenses of the Railroad Commission provided that the total annual expense, with certain exceptions, should not exceed $100,000 and should be borne by the several corporations owning or operating railroads according to their means to be apportioned by the comptroller.

These sections of the Railroad Law (169 and 170) were repealed by the Public Service Commissions Law and the scheme for financing the Public Service Commission is different, in that its expenses are paid by the State, in the case of the Commission for the second district, and in part by the State and in part by the city of New York as to the Commission for the first district. The provision, therefore, which allowed the Railroad Commissioners and their subordinates to accept and use passes for transportation on railroads in the course of their duty was one which was in accordance with the statutory provision that the railroads were to bear the expenses of the Commission, but does not coincide, in reason or in principle, with the provisions of the Public Service Commissions Law, that the expenses of the Commission are to be borne by the city or by the State and that free transportation is specifically forbidden.

I do not think that any officer or subordinate of the Commission can legally receive or use free transportation upon any railroad or street railroad within the jurisdiction of the Commission, even in the course of his duty of inspecting or supervising the construction or operation of such railroad, except as hereinafter stated.

With reference to the functions of the Public Service Commission, in respect to rapid transit contracts for the construction, maintenance and operation of subways, it seems to me there is an exception to the general rule affecting the Commissioners and employees of the Commission, under the provisions of section 33 of the Public Service Commissions Law, wherein it is provided:

> "Nothing in this act shall be construed * * * to prohibit any common carrier from transporting persons or property as incident to or connected with contracts for construction, operation or maintenance, and to the extent only that such free transportation is provided for in the contracts for such work."

By the terms of the McDonald contract for the construction, maintenance and operation of the Manhattan–Bronx subway and in the contract for the Brooklyn–Manhattan subway, there are provisions which seem to come under this provision of the act. The McDonald contract, in the construction portion, at page 61, reads as follows:

> "The contractor will at all times give to the board and its members, the engineer and the assistants and superintendents under the engineer and any person designated by the board or its president, all facilities, whether necessary or convenient for inspecting materials to be furnished and the work to be done under this contract. The members of the board, the engineer, and any superintendent, assistant or other person bearing

his authorization or the authorization of the board or its president, shall be admitted at any time, summarily and without delay, to any part of the work or to the inspection of materials at any place or stage of their manufacture, preparation, shipment or delivery."

In Contract No. 2—known as the contract for the Brooklyn–Manhattan subway — there is a clause (page 55) somewhat similar, reading as follows, also in the construction part of the contract:

"The board contemplates and the contractor hereby approves the most thorough and minute inspection by the board, its engineer, and their representatives and subordinates, of all work and materials and of the manufacture or preparation of such materials from the beginning of construction to the final completion of construction and equipment."

Both the Manhattan–Bronx subway contract (page 173) and the Brooklyn–Manhattan contract (page 171) also contain a provision reading as follows, in the operating part of the contract:

"The contractor shall at all times provide all reasonable conveniences for the inspection of the railroad and equipment and every part thereof by the board, its members, its engineers and subordinates. The members of the board, its engineers and subordinates, shall, at any time, upon its authority, have access to any part of the railroad or equipment or to any materials therefor in process of manufacture."

In the construction work it seems to me that the two provisions first mentioned are sufficient, as to these subways, to authorize free transportation to be used by the representatives of the Commission charged, under the direction of the chief engineer, with the inspection of the construction work.

In view of the city's lien on the equipment and the contractor's specific obligations as to maintenance and operation of the subways, I think also that the section of the contract last above quoted is sufficient to authorize the engineers and other subordinates of the Commission to use free transportation to inspect the railroad and its equipment with reference to its maintenance and operation. This is limited to their necessary presence in the stations and cars of the operating company in the performance of their duty of inspection.

Very truly yours,

ABEL E. BLACKMAR,

Counsel to the Commission.

ELECTRIC CURRENT — SALE OF — WITHOUT USE OF PUBLIC PROPERTY.

November 15, 1907.

Hon. MILO R. MALTBIE, *Commissioner, Public Service Commission, First District:*

DEAR SIR.— I am in receipt of your letter of November 13th, asking whether a person owning an electric light plant and supplying current for his own house, may supply current to another person, in the same block,

without using the street and without extending wires or allowing mains upon the property of the third party; also whether the rule is different in the case where the wire is run over a third party's premises but with his consent.

It has been held in the case of *Fanning v. Osborne*, 102 N. Y. 441, that the right to construct and operate a street railway is a franchise which must have its source in the sovereign power and that the construction and maintenance of a street railway by any individual or association of individuals, without legislative authority, would constitute a public nuisance.

I think the same rule would apply to the construction and operation and transmission of electricity where the use of a public street was necessary in the conducting of the enterprise in the State of New York. In a case, however, where no use of the public street or public property is necessary, and the consent of a third party for the use of his property is obtained, as in the case you mention, I think there is no franchise exercised and that no legislative authority is necessary.

I find in a recent text book, known as Joyce on Electric Law, section 184a, a statement, based upon a Maryland case not long since decided, that the right to produce and sell electricity as a commercial product without legislative authority or franchise, is a business which is not a prerogative of government, but is opened to all who may desire to engage therein, like the manufacture and sale of any other commercial product, but the use of city streets for the purpose of delivering electricity to the consumer is a franchise which must be derived directly or indirectly from the State.

I am of the opinion, therefore, that one who owns an electric plant may supply current to another person in the same block, without using the street and may extend his wires upon the property of the third party, with his consent, for the purpose of supplying electricity, and may supply the same in that manner without legislative authority or procuring a franchise so to do.

Very truly yours,

ABEL E. BLACKMAR,

Counsel to the Commission.

STEINWAY TUNNEL.

November 21, 1907.

Hon. MILO R. MALTBIE, *Commissioner, Public Service Commission for the First District:*

DEAR Mr. MALTBIE.— I have your letter of the 13th inst., asking for a brief summary of the situation in regard to the Steinway Tunnel, and particularly as to

(1) "What litigation is now pending in the courts" and

(2) "What court decisions have been rendered upon the question of the right of the company to construct and to operate the road."

In reply I have to state as follows:

The New York and Long Island Railroad Company was incorporated July 30, 1887, under chapter 140 of the Laws of 1850, known as the General Railroad Act, for the purpose of constructing and operating a railroad five miles long, more or less, from a point in Long Island City, one mile from the East

river, thence partly underground and partly in cutting to the river, thence under the river, and thence by tunnel under certain streets in New York city.

Its corporate existence was to be ninety-nine years.

Its capital stock was to be $100,000, consisting of one-thousand shares of $100 each.

The General Railroad Act of 1850, under which the company was incorporated, was amended by chapter 775 of the Laws of 1867, which provided, among other things, that if any corporation formed under the act of 1850,

> "shall not, within five years after its articles of association are filed and recorded in the office of the Secretary of State, begin the construction of its road, and expend therein ten per cent. on the amount of its capital, or shall not finish its road and put it in operation in ten years from the time of filing its articles of association, as aforesaid, its corporate existence and power shall cease."

The route of the road and tunnel, as constructed, is approximately as follows:

From Park avenue and Forty-second street, Manhattan, under Forty-second street; thence under the East river to approximately the west end of Fifth street, Long Island City; and thence under private property to Fourth street and under Fourth street to a point between Jackson avenue and Van Alst avenue, Long Island City.

The route thus consists of three main sections, namely,

(1) Park avenue to the East river.

(2) Under the East river.

(3) From the river to the Long Island terminus.

The company bases its right to construct and operate its road over this route in the main on three consents, as follows:

(1) Resolution of the board of aldermen of the old city of New York, approved December 31, 1890.

(2) Patent issued by the State of New York, January 5, 1891.

(3) Resolution of the board of aldermen of Long Island City, approved October 27, 1891.

By the first resolution, above mentioned, the city assented

> "to the construction of a double track railroad by the New York and Long Island Railroad Company, in, by and through a tunnel beneath the surface of Forty-second street, from its easterly end, to a point therein between Tenth and Eleventh avenues, in said city, with such connections, branches, turn-outs, sidings and switches, as may be requisite and necessary, in accordance with the plans and profiles of such railroad heretofore deposited with this board, or such modification thereof as shall be approved by the Commissioner of Public Works of such city."

The consent of the State of New York, above mentioned, was granted by the following patent:

> "The People of the State of New York, by the Grace of God, Free and Independent: To all to whom these Presents shall come, Greeting:
>
> "Know Ye, That pursuant to chapter 140, Laws of 1850, as amended by chapter 601, Laws of 1886, and a resolution of the Commissioners of

the Land Office, adopted November 25, 1890, we have given and granted, and by these presents do give and grant unto the New York and Long Island Railroad Company, its successors and assigns, a right of way 99 feet in width and 50 feet in height within which to construct a tunnel for the use and operation of the above-named grantees railroad, beneath the waters of the East river upon and along the route of said railroad between the city of New York and Hunter's Point in Long Island City, as shown in plan and profile, upon the charts filed in the office of our Secretary of State with the water grant papers of the month of January, 1891.

"Together with all and singular the rights, hereditaments and appurtenances to the same belonging or in any wise appertaining; to have and to hold the above described premises unto the said the New York and Long Island Railroad Company, its successor and assigns forever.

"In testimony whereof, we have caused these our letters to be made patent, and the great seal of our said State to be hereunto affixed * * *."

By the second resolution, above mentioned, Long Island City assented to the construction of a double track railroad

"Beginning at a point under the ground at or near the westerly end of Fifth street and in the middle line thereof at low water mark, on the east side of the East river, in said city; thence running easterly beneath streets and private property to a point at or near the intersection of Fourth street and West avenue; thence along Fourth street to or near Van Alst avenue, with a station hereafter to be located between the easterly shore of the East river and Van Alst avenue; thence northeasterly by a curved line to Meadow street * * *."

For compensation to the city the New York city ordinance provided that the company should

"pay annually to the city of New York three per centum of its gross earnings or receipts from transportation of persons and property on its railroad within said city; such payment to be exclusive of all taxes levied by and payable to the city of New York on the real or personal property, capital stock or income of said company, and the books of said company showing the amount of its said gross earnings or receipts shall at all reasonable times and hours be open to the inspection of the comptroller of the city of New York (or to his duly authorized agents) for the purpose of verifying the returns thereof of said company."

The company's contractor started work in May, 1892, and up to July 30, 1892, there was claimed to have been expended the sum of $11,718.33, or more than ten per cent. of the capital stock of the company. Work continued down to December, 1892, when an explosion occurred, whereupon the work ceased for nearly thirteen years, that is, until 1905, when work was again started. In thus resuming operations, the company relied upon chapter 775

of the Laws of 1867, and various subsequent acts, the last of which was chapter 597 of the Laws of 1903, as extending until January 1, 1907, the time within which to complete the road.

In August, 1905, the company obtained from the fire commissioner of the city of New York licenses to use and keep explosives at four shafts where it was prosecuting its work, and in October and November of the same year it obtained permits from the Building Department to erect certain temporary structures. On January 22, 1906, the inspector of combustibles of the fire department of the city of New York informed the Degnon Contracting Company, which company was doing the work, that four permits for blasting had been revoked by "direction of the corporation counsel." Two days later, on January 24, 1906, the superintendent of buildings for the borough of Manhattan informed the contracting company that certain building permits were revoked "for the reason that the right to build this tunnel is disputed."

Thereupon, by summons and complaint dated February 8, 1906, the railroad company began action against the fire commissioner of the city of New York, the inspector of combustibles of the fire department, the superintendent of buildings of the borough of Manhattan, and the city of New York, to stay the revocation of these permits. The answers of all defendants were served February 9, and issue was joined by the service of an amended answer on April 17, 1906. A preliminary injunction was thereupon granted.

As to the matters at issue in this case, the company, presumably because it felt that its right to construct the tunnel was challenged, considered it necessary or at least advisable to allege and establish its two-fold right to carry on its work and to obtain an injunction restraining interference on the part of the city authorities. Accordingly, it alleged its due incorporation and its compliance with the legal requirements necessary to entitle it to construct, maintain and operate its proposed railroad.

By their amended answer the defendants put in issue, or attempted so to do, all of the material obligations of the complaint.

The position of the company, as stated subsequently by its counsel, was as follows:

> "By the arbitrary act of the officials above referred to, in seeking to revoke permits which they had theretofore duly issued, after careful deliberation the plaintiff (that is, the railroad company) was placed in the position where it was compelled, in order that it might continue the prosecution of the work of constructing its railroad, to appeal to the court for an injunction restraining the arbitrary and unwarranted intervention by those officials. The defendants (that is, the city authorities) thereby threw upon the plaintiff the burden of establishing its right to construct its railroad."

When the matter came before Mr. Justice Blanchard of the Supreme Court, on motion to continue *pendente lite* the preliminary injunction, the justice, in his opinion printed in the Law Journal of March 7, 1906, went into the rights of the company and the city at some length. He was inclined to sustain the contention of the company to the effect that it was duly incorporated, and that the acts under which it based its right to prosecute its work were constitutional and valid.

He said:

"Independent of the foregoing consideration, however, the validity of the plaintiff's franchise, in which a large amount of capital is invested and great public interests are concerned, cannot properly be determined upon affidavits. To resolve this question now against the plaintiff would permit such interference with the plaintiff's work as would prevent its completion within the time set therefor, upon which its franchise is conditional. The plaintiff will be irremediably damaged if the doubt were now resolved against. The defendant, on the other hand, cannot be prejudiced by the postponement. For this reason the court may well refuse to determine the question upon the present motion, and, instead, may properly make a restraining order permitting the continuance of the work under the alleged franchise until the question may be tried in court according to the rules of evidence. Upon this ground, as well as upon the merits, the plaintiff's move for a continuation *pendente lite* of the preliminary injunction is granted."

The case came on for trial before Mr. Justice Fitzgerald in June, 1906. In his conclusions of law, Mr. Justice Fitzgerald found that

(1) "The plaintiff had acquired at the time of the beginning of this action, and now has, due legal power and lawful authority to construct and operate its tunnel and railroad."

(2) "There was no warrant or authority in law for the attempted revocation of any of said licenses and permits, either for the use of explosives or for temporary buildings; and said licenses and permits were and are of full force and effect."

(3) "The time of the plaintiff to complete the construction of its tunnel will expire on the 31st day of December, 1906."

(4) "The plaintiff is entitled to judgment * * * restraining the defendants, the city of New York * * * from in any respect molesting or interfering with the plaintiff or the Degnon Contracting Company in the construction of the plaintiff's tunnel and railroad."

In his opinion, printed in the Law Journal on November 14, 1906, Mr. Justice Fitzgerald said:

"The validity of plaintiff's incorporation under the provisions of the General Railroad Act of 1850, as affected by various subsequent statutes, particularly the prohibition of chapter 10, Laws of 1860, applicable only to the city of New York, the constitutionality of the Tunnel Act, chapter 582, Laws of 1880, the alleged failure of the defendant in any event to comply with its provisions, the legality of the consents of the local authorities and of the abutting owners, the lapsing by expiration of time of the defendant's franchise and its failure to comply with statutory requirements in the matter of the change of route, were all sharply presented and definitely determined"

when the matter was before Mr. Justice Blanchard.

Inasmuch as no attempt had been made to distinguish the facts presented before Mr. Justice Fitzgerald from those presented on the motion, Mr. Justice Fitzgerald stated that he considered the doctrine of *stare decisis* was applicable to the matter as it came before him. Accordingly, he rendered his decision for the company and judgment was thereupon entered.

The appeal from this judgment was argued in the Appellate Division in October of the present year, and a decision should be expected shortly from the Appellate Division.

In addition to the first action a second action was brought by the city of New York in February of the present year. The substance of this second action is, that the corporate existence and powers of the railroad company ceased January 1, 1907, and that its work since that time has been carried on without legal authority. Accordingly, the city asked judgment permanently enjoining and restraining the construction and operation of the railroad, declaring the corporate existence and powers of the company to have ceased and also declaring the franchise granted by the city of New York and Long Island City to be forfeited and void. To this complaint the company demurred, and the demurrer was argued before Mr. Justice Davis of the Supreme Court, October 8, 1907.

Trusting that the above may be of assistance in this matter, I am,

Yours very truly,

ABEL E. BLACKMAR,

Counsel to the Commission.

EXPRESS COMPANY — DISCRIMINATION AND PREFERENCE — $50 CLAUSE AS AFFECTING ADJUSTMENT OF LIABILITY.

November 22, 1907.

TRAVIS H. WHITNEY, Esq., *Secretary, Public Service Commission, First District:*

DEAR SIR.— I have your letter of the 6th inst., transmitting the file of correspondence relative to the claim of Spear & Company against the Adams Express Company.

In the letter of Spear & Company to you of the 12th of September last, they say:

> "We made a shipment by Adams Express on Nov. 16, 1906, to E. P. Leveen & Co., 475 Broadway, New York city.
>
> "The goods were never delivered by Adams Express Co., and they offered to settle for the lost merchandise for $50.
>
> "They claim that your Commission will not allow them to pay more than $50 for any claim.
>
> "Kindly advise us whether they are correct in this assertion, and oblige."

I confine myself to the inquiry contained in this letter for, although in some of the later letters the complainant seems to have the impression that

the Commission is about to enforce the payment of its claim, that is not within the duties of the Commission, and Spear & Company must take such action in the courts as they are advised by their counsel.

The correspondence file does not contain the express receipt referred to in the letters, but I assume it to have been in the usual form and to have limited liability thereunder to fifty dollars, and I also assume, for the purposes of this case, that such a limitation is not affected by the provisions of the Public Service Commissions Law. The Public Service Commissions Law, by sections 31, 32 and 35, prohibits discrimination. Section 32 is especially broad, providing:

> "§ 32. *Unreasonable preference.*— No common carrier shall make or give any undue or unreasonable preference or advantage to any person or corporation or to any locality or to any particular description of traffic in any respect whatsoever, or subject any particular person or corporation or locality or any particular description of traffic to any prejudice or disadvantage in any respect whatsoever."

and I can understand how the general counsel to the express company, looking at it from the company's standpoint, might say that in settling claims in excess of its strict contractual liability it would run some risk of being called to account by one of the Commissions. Going back, however, to the primary purpose of the act, we find that the two underlying evils of discrimination it was intended to prevent were inequality in rates and inequality in service. This case has proceeded beyond that point; there is no objection to the rate charged, and the service is under attack only in that the property entrusted to the express company has been lost. The claim is made for a money equivalent of the goods lost. The only difficulty in answering an inquiry like the present one is that the recognition of excessive or baseless claims might furnish a ready method by which the common carriers, if they so desire, could evade the prohibition of discrimination in rates, that is, a carrier could allow a rebate under the guise of an allowance for property lost or damaged.

But in spite of this difficulty I do not think that there is any authorization for the Commission to interfere with a just and *bona fide* attempt to adjust liability.

Whether the claimants could recover in an action at law more than the fifty dollars offered in settlement I do not attempt to determine, but I think that even if they could not, the excess payment is a matter between the express company and its stockholders and is not subject to regulation by the Commission any more than would be the extent of its employees' compensation or the adjustment of any other kind of liability.

I should, therefore, suggest that you advise Spear & Company that without considering the details of their claim, this Commission has no objection to any adjustment they may make with the Adams Express Company, provided that it is a *bona fide* adjustment and not an attempt to evade the prohibition against discrimination in rates or service.

I return herewith the correspondence file transmitted to me.

Very truly yours,

ABEL E. BLACKMAR,

Counsel to the Commission.

ELECTRICITY — FIXING RATES — INVESTIGATIONS.

December 5, 1907.

Public Service Commission of the First District:

GENTLEMEN.— I herewith transmit to you a form of resolution for the investigation of the electric lighting companies in the city of New York and also the Consolidated Telegraph and Electrical Subway Company and the Empire City Subway Company, Limited, which seem to me also within your jurisdiction.

You will notice that the resolution does not involve an inquiry into the organization and capitalization of the companies or into the cost of the manufacture and distribution of electricity. The reason why I have omitted these subjects of inquiry is, that I have serious doubts as to whether the law justifies an inquiry into these subjects upon an investigation made on the motion of the Commission.

The Commission has no power under the act, as I believe, to make an order fixing the maximum price of electricity after a hearing made upon its own motion, but can proceed only upon a complaint filed as provided in section 71. As these elements of inquiry which are omitted are pertinent only to the question of fixing the proper price, an inquiry into them cannot be made on the motion of the Commission, unless other provisions of the act expressly authorize it.

A careful analysis of the law shows that an inquiry into these subjects is not expressly authorized except on a hearing made upon a complaint. The provisions of section 71, regarding the method of bringing about an inquiry into the price upon a complaint made by third parties is a strong expression of legislative intent that such inquiry shall not proceed upon the motion of the Commission.

This Commission has no general powers of investigation and cannot exercise such powers except in furtherance of the purposes of the act or as expressly permitted; and as I have reached the conclusion that the act contains no general provisions authorizing an investigation into these subjects and that these subjects are pertinent only to an investigation for the purpose of fixing the price, which can only be had upon complaint, I am of the opinion that we cannot properly include these subjects in the resolution which I present.

With respect to the general powers of investigation, the article of the law which is applicable to gas and electric corporations differs widely from the articles applicable to railroads, common carriers and street railroads. Articles 2 and 3, referring to these latter agencies, contain an express authorization of a general investigation into the general condition and capitalization of the companies (see section 45); but such general authorization is not found in the article relating to gas and electric corporations.

Subdivisions 2 and 5 of section 66 seem to me to authorize such an investigation as this resolution provides for, but I cannot find any warrant in the act for extending it to the subjects which I have omitted.

Yours respectfully,

ABEL E. BLACKMAR,

Counsel to the Commission.

OPINIONS UNDER RAPID TRANSIT ACT.

CONTRACTOR FOR CONSTRUCTION OF SUBWAY UNDER RAPID TRANSIT ACT MAY OCCUPY CROSS-STREETS WITHOUT PERMIT FROM THE CITY AUTHORITIES BUT UNDER AUTHORITY OF A PERMIT GRANTED BY PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT.

July 31, 1907.

Public Service Commission for the First District:

GENTLEMEN.— I have received your communication enclosing a demand by the New York Dock Company that the structure containing boilers and compressed air machinery in Furman street and claimed to be a nuisance and to be there without right, should be removed.

I requested Mr. Rice, the chief engineer, to report as to the character and situation of the structure, and have received from him a letter dated July 29th, stating that it was authorized under permit number 185, granted November 23, 1906, which was valid for the year 1906, but was lately extended to October 1, 1907, and also stating that it would be unwise to order the removal of the structure before October 1st, because it would be required to provide the air supply needed to complete the ventilating shaft now under construction on Joralemon street.

I recently read in the papers that the New York Dock Company had applied for a writ of peremptory mandamus directed to the officials of the city, commanding them to remove the structure as an encroachment upon the street and a nuisance, and that the same had been argued before Mr. Justice Scudder, of Kings county, and decision reserved. I communicated with the Hon. James D. Bell, of corporation counsel's office for the borough of Brooklyn, who confirmed this account. Colonel Bell informed me that he had opposed the granting of a mandamus.

The right of the Board of Rapid Transit Railroad Commissioners to issue permits to the contractors to occupy portions of the street has recently been before the Appellate Division of the Supreme Court, in the Second Department. In that case the plaintiff was a subcontractor under the Board of Rapid Transit Railroad Commissioners, and with the consent and pursuant to the permit of such board occupied certain streets in Brooklyn which crossed the street under which the construction was progressing. The occupation of such streets was without the permit of the borough president or the commissioner of public works. These latter officials threatened to remove the plaintiff from the cross streets and the plaintiff brought an action to restrain such removal, claiming a right to occupy the same under the authority of the permit granted by the Rapid Transit Railroad Commissioners.

The motion for an injunction was granted at Special Term, and the borough president and commissioner of public works appealed. On July 23d, the Appellate Division handed down a decision affirming the order and finally deciding in favor of the validity of permits granted by the Board of Rapid Transit Railroad Commissioners for the occupation of streets and cross streets

by contractors and subcontractors, so far as the same may be reasonably necessary to the prompt and proper progress of the work.

The power to grant such permits has devolved upon this Commission as successor of the Board of Rapid Transit Railroad Commissioners.

I retain the papers in this matter in my hands, in order that I might act thereon if occasion should require.

Yours very truly,

ABEL E. BLACKMAR,

Counsel to the Commission.

LEASES FOR WORK OF COMMISSION — APPROVAL OF SINKING FUND COMMISSIONERS AND EXECUTION BY CITY COMPTROLLER NOT REQUIRED — TRUSTEES OF PUBLIC BUILDINGS — PUBLIC SERVICE COMMISSIONS LAW, SECTION 10.

July 31, 1907.

TRAVIS H. WHITNEY, Esq., *Secretary, Public Service Commission for the First District:*

DEAR SIR.— I am in receipt of your letter of July 29th, advising me of a resolution of the Commission, referring to me the question as to whether the lease of permanent offices by the Commission should be submitted to the Sinking Fund Commission for approval, and also the question of the designation of newspapers for rapid transit advertisements.

Mr. Semple, of this office, in a conversation yesterday with Deputy Comptroller Phillips and Mr. Brown of the Finance Department, Real Estate Bureau, was informed by them that in their opinion leases by the Public Service Commission for the first district should be submitted for approval to the Commissioners of the Sinking Fund, because the Commissioners of the Sinking Fund are "trustees of public buildings" within the meaning of section 10 of the Public Service Commissions Law, and also because under section 217 of the city charter, applications for leases for the purposes of the city of New York or any of the counties contained within its territorial limits, must be presented to and passed upon by the Commissioners of the Sinking Fund, and by section 149 of the charter, when such leases are authorized by the Board of Sinking Fund Commissioners, they must be entered into by the comptroller on behalf of the city.

I am of the opinion, however, that the reference in section 10 of the Public Service Commissions Law to trustees of public buildings applies only to those officials who are defined by the Public Buildings Law as trustees of public buildings, viz., the Governor, Lieutenant-Governor and Speaker of the Assembly, who by that act are entrusted with the control of specified public buildings in Albany; and that the words "trustees of public buildings" do not include the Commissioners of the Sinking Fund in the city of New York.

The provisions of section 217 of the charter are with respect to leases of real estate for the purposes of the city of New York or in the counties contained within its territorial limits. This section was taken from the Consolidation Act of 1862, chapter 410, passed many years prior to the

enactment of the Rapid Transit Act, and in my opinion it is limited in its operation to the purposes mentioned. The lease of offices for the Public Service Commission is not for the purposes of the city of New York or any of the counties contained within its territorial limits, but for the purposes of a State commission. It is significant also that the Board of Rapid Transit Railroad Commissioners did not submit leases to the Commissioners of the Sinking Fund for approval, but made the same directly.

By section 149 of the charter, leases when approved by the Commissioners of the Sinking Fund are required to be entered into by the comptroller on behalf of the city; but there is a provision later on in this section to the effect that nothing therein contained shall affect the Board of Rapid Transit Railroad Commissioners.

I am therefore of the opinion that the lease by the Public Service Commission for the first district of its permanent offices, need not be submitted for approval to the Commissioners of the Sinking Fund.

Respecting the further question as to the designation of newspapers for rapid transit advertisements, the reading of the Rapid Transit Act seems plain. The mayor designates the newspapers in which hearings on the form of the contract are advertised, and the Public Service Commission, as successor to the Board of Rapid Transit Railroad Commissioners, designates the newspapers in which the contracts are advertised for letting. (See sections 36 and 37 of the Rapid Transit Act.)

Yours very truly,
ABEL E. BLACKMAR,
Counsel to the Commission.

CONTRACTOR FOR CONSTRUCTION OF A RAPID TRANSIT RAILWAY UNDER RAPID TRANSIT ACT MAY RELOCATE WATER PIPES UNDER PERMIT FROM THE COMMISSION WITHOUT PERMIT OF OR SUBMISSION TO DEPARTMENT OF WATER SUPPLY.

August 6, 1907.

TRAVIS H. WHITNEY, Esq., *Secretary, Public Service Commission for the First District:*

SIR.— I am in receipt of your letter of July 24th, transmitting a copy of communication of the Hon. John H. O'Brien, Commissioner of Water Supply, etc., requesting the Public Service Commission for the First District to take up with the Westchester Lighting Company the question of the removal of its main on Broadway between 230th and 242d streets, on the ground that the same was laid without the approval of the Commissioner or the borough president, and because the space is soon to be needed for the placing of a new twelve-inch water pipe, and asking also that hereafter all contractors working under the Public Service Commission be required to submit their plans for approval to the Department of Water Supply under section 469 of the charter, where it becomes necessary to shift water or gas pipes or other subsurface structures.

Upon investigation of the facts by your Chief Engineer and by Commissioner Bassett, as reported in writing and transmitted also to me by you, it appears that the Westchester Lighting Company's pipe was relaid by a contractor for the building of superstructure for a rapid transit railway in that street under the terms and obligations of a contract between the contractor and the city, acting by the Board of Rapid Transit Railroad Commissioners, the pipe being a subsurface structure in the line of the improvements and necessary to be relocated at the contractor's expense by the terms of his contract.

It was so relocated without a permit from the Department of Water Supply, because under his contract with the city he was authorized and was bound to do it, and the corporation counsel and the courts have held that a permit of the Board of Rapid Transit Railroad Commissioners is sufficient authority for a contractor to proceed with work, and because the permit of the Commissioner of Water Supply is unnecessary.

I am also informed by the Chief Engineer's report that the relocation and placing of the Westchester Lighting Company's pipe was with the knowledge of the officials of the Department of Water Supply, and that there is sufficient room in the street for the placing of the proposed twelve-inch water main without a removal of the gas main.

Under the circumstances I cannot see that the contractor or this board is under a duty to take up and relocate the gas pipe complained of, and I cannot advise you to undertake to do it.

The request of the Commissioner that hereafter contractors working under the Public Service Commission be required to submit their plans for approval to the Department of Water Supply under section 469 of the charter, when it becomes necessary to shift subsurface structures, introduces to this board the same question which was often brought to the attention of the Board of Rapid Transit Railroad Commissioners, whether in prosecution of its duties under the Rapid Transit Act and contracts made thereunder, permits of various city departments are necessary to a use of the streets or to opening the same by the board or its officers or contractors.

The question was finally submitted to the corporation counsel, and by the opinion of Mr. Delaney, dated June 19, 1906, addressed to the borough president, to be found in volume 7, page 4226, of the Rapid Transit Board's minutes, it was held that that board alone had control, and that a permit from such board is all that is required to enable a contractor to proceed, and it was recommended to the borough president that for the convenience of his office an arrangement be made whereby the Board of Rapid Transit Railroad Commissioners should notify the borough president's office of each permit issued. The same question substantially has been in various forms also before the courts; most recently in the case in the Second Department, Appellate Division, not yet reported, brought by the Rapid Transit Subway Construction Company against Bird S. Coler, as president of the borough of Brooklyn, to restrain the removal of the plaintiffs from cross streets occupied by them for the purposes of a construction contract without the permit of the borough president.

In this case the court said: "It is apparent * * * that it was the intent of the Legislature to confer upon the Commission all of the necessary powers properly to construct the subway, and this without concurrent

action of the ordinary municipal authorities, except where such action was specifically required by the act. The power to grant a valid permit to a contractor or subcontractor to occupy an adjacent part of cross streets, where such is necessary in the prosecuting of the work is * * * an incidental power which the Commission possess under the act."

In regard to the placing of subsurface structures in the line of construction and necessary to be relocated by a contractor under such a contract made by the city pursuant to the Rapid Transit Act, I think the authority of the Commission is final, and that this board or its contractor is not required by law to submit the plans for such relocation to the Department of Water Supply, but it would seem well that the practice be observed of notifying the Department of Water Supply of any proposed action by the contractor, and of regarding, as far as may be practicable, its wishes in the matter.

Yours very truly,

ABEL E. BLACKMAR,

Counsel to the Commission.

COMMISSION AFTER APPROVAL OF SEPARATE CONTRACT FOR CONSTRUCTION OF FOURTH AVENUE SUBWAY, HAS DISCRETION AS TO TIME OF LETTING CONTRACTS AND MAY RESCIND RESOLUTION ADOPTING ROUTE PASSED BY RAPID TRANSIT BOARD.

September 18, 1907.

Public Service Commission for the First District:

GENTLEMEN.— I am in receipt of your communication dated yesterday, in which you ask for opinions on the following questions:

(1) Whether the Brooklyn Rapid Transit Company has any franchise rights on New Utrecht avenue in Brooklyn, and the nature and extent of such rights.

(2) Whether the Rapid Transit Act requires the Public Service Commission to proceed to make contracts for the construction of the Fourth avenue subway.

I have referred the first of these questions to one of my assistants for investigation, and will report the result of such inquiry later.

I answer the second of said questions as follows:

Section 34 of the Rapid Transit Act contains the following provision:

> "The Board of Rapid Transit Railroad Commissioners for any city shall, prior to the time of the final grant of any franchise under the provisions of this act or the making of a contract for construction of any railroad under the provisions of this act, have power to rescind and revoke any resolution or resolutions of such board adopting any routes or general plan for the rapid transit railroad adopted by such board and, in the discretion of the board, in lieu thereof to adopt new routes and general plan."

It necessarily follows from this that your board is not under any legal compulsion to construct the Fourth avenue subway, but has power to rescind the resolution establishing such route, and so put an end to the whole project.

The question, however, might arise, whether your board is limited in its action to one of two alternatives — to proceed immediately with the construction of the said subway, or to rescind the resolution establishing the route. The decision of this question requires a further examination of the law.

At the time when your board came in power, the Board of Rapid Transit Railroad Commissioners had adopted routes and a general plan for a number of subway lines in the city of New York, including routes known as:

(1) The Seventh and Eighth avenue route.
(2) The Lexington avenue route.
(3) The Third avenue route.
(4) The Jerome avenue route.
(5) The Fourth avenue and Bensonhurst route.
(6) The (so-called) Tri-borough route.
(7) The West Farms and White Plains route.

The routes, together with others, had been adopted by the Board of Rapid Transit Railroad Commissioners, approved by the board of estimate and apportionment, and the consents of the abutting property owners or of the Appellate Division in lieu thereof had been obtained. The estimate cost of the routes above specified is between 150 and 200 million dollars.

Under the Rapid Transit Act, as amended by the Elsberg law, the city might proceed with these subways in any of the four following ways:

First. By a contract for construction, maintenance and operation, with the same person.

Second. By a contract or contracts for construction, with separate contracts for equipment and operation.

Third. By a contract or contracts for construction and equipment and a separate contract for operation.

Fourth. By a contract or contracts for construction and equipment followed by municipal operation.

It is the province of the Board of Estimate and Apportionment to decide which of these courses shall be pursued.

On the 7th of December, 1906, the Board of Estimate and Apportionment adopted a resolution, recommending to the Board of Rapid Transit Railroad Commissioners that alternate bids be invited, first, for construction alone, and second, for construction, equipment and operation for each of the routes hereinabove specified. Under this resolution, bids for three of the subways, viz., the Seventh and Eighth avenue, the Third avenue and the Jerome avenue were invited, but no proposals were received.

On the 4th day of June, 1907, at the request of the Rapid Transit Railroad Commissioners, the Board of Estimate and Apportionment passed a resolution modifying the resolution hereinbefore referred to of December 7, 1906, as to the Fourth avenue and Bensonhurst route and the said Tri-borough route, and, instead of the provisions of the resolution of December 7, 1906, the Board of Rapid Transit Railroad Commissioners was authorized to let contracts for construction only for the Manhattan bridge route, part of route 9-C in Brooklyn, part of route 11-E-1 in Brooklyn, and routes 11-A, 11-B, 11-F (Bensonhurst route) in the borough of Brooklyn, said routes together forming

a line from Chrystie street, in the borough of Manhattan, across the Manhattan bridge and under Fourth avenue in the borough of Brooklyn.

The Rapid Transit Act contains the following provision:

> "As soon as such consents, where necessary, shall have been obtained for any rapid transit railroad or railroads and the detailed plans and specifications have been prepared, as is provided in section 6 of this act, the said board, for and in behalf of the city, shall enter into a contract with any person, firm or corporation which, in the opinion of said board, shall be best qualified to fill and carry out said contract, for the construction of said road or roads," etc.

This provision must be read in connection with other clauses, viz.:

> (Section 34) "And the said board may in any case contract for the construction of the whole road, or all the roads provided for by the aforesaid plans in a single contract, or made by separate contracts, executed from time to time, or at the same time, with one or more such persons, firms or corporations, provide for the construction of such road or roads," etc.
>
> (Section 34-e) "Nothing contained in this act shall be deemed, or be construed as intending, to limit, or as limiting, in any manner, the discretion of the board of rapid transit railroad commissioners, provided in the opinion of the board of estimate and apportionment, or other analogous local authority of such city, it is expedient, practicable and in the public interest to do so, to enter into contracts for construction, equipment, maintenance and operation with the same person, firm or corporation or for any one or more of said purposes with the same person, firm or corporation, or with different persons, firms or corporations, either in one contract or in separate contracts, and at any time or times. (New section, Laws 1906, chapter 472, section 6.)"

These provisions impose on the board the general duty to proceed with construction of a system of rapid transit in the city. But there is no greater obligation to proceed with one route than with another. As to the time when bids shall be invited for any particular route, I believe that discretion rests with the Commission as successor to the power of the Board of Rapid Transit Commissioners.

This discretion in the Commission was recognized by the Appellate Division of the Supreme Court in the *Matter of the Board of Rapid Transit Railroad Commissioners, Etc.*, 114 App. Div. 379. This was on application to approve nineteen different routes, the estimated cost of the construction and equipment of which aggregated $450,000,000, whereas the city's borrowing capacity was only $61,000,000. The court refused to tie up these routes permanently, and limited its approval to a period of two years, saying:

> "This will enable them (*i. e.*, the board) within the period named in view of the then existing condition of the city's finances, to determine just what routes should be built; and after that time they should be re-

quired, if able to construct other routes, to renew their application to this court."

I am of the opinion that the Commission is under no legal obligation to proceed at once to contract for the construction of the Fourth avenue subway, but has discretion as to the time when the contract shall be made, and also as has been pointed out, has full power to rescind the resolution adopting this route.

Yours respectfully,
ABEL E. BLACKMAR,
Counsel to the Commission.

COMMISSION HAS JURISDICTION OF THE McADOO TUNNEL AND THE METHOD OF ITS CONSTRUCTION.

September 19, 1907.

TRAVIS H. WHITNEY, Esq., *Secretary, Public Service Commission for the First District:*

DEAR SIR.— Referring to the letter of S. Marks, dated 6th September, 1907, which I return herewith, complaining of the noisy night construction work on that portion of the tunnel now being built by the Hudson and Manhattan Railroad Company, which is under Mr. Marks' premises, number 419 Sixth avenue, in the borough of Manhattan, transmitted to me with the letter of the secretary of the Commission of the 10th inst., asking my opinion as to the extent of the Commission's jurisdiction over such tunnel, I desire to advise you that in my opinion such tunnel and the method of doing the work therein is within the jurisdiction of the Commission.

Without reference to section 48 of the Public Service Commissions Law, which I think is of itself sufficient to vest the Commission with jurisdiction, the contract between the tunnel company and the city as embodied in the certificate of the Board of Rapid Transit Railroad Commissioners to the tunnel company of February 2, 1905, provides, paragraph V:

> "All plans for, and the method of doing the work, including all plans for stations and station arrangements, shall from time to time be subject to the approval of the board."

And further, paragraph XIII:

> "The city, the board and all duly authorized representatives of the city, shall have the right at all reasonable times to inspect the railroad and any part thereof, as well during construction as afterwards, and to enter thereon when necessary for the examination, supervision or care of any property of the city, or of abutting property owners, or for any proper purpose. Nothing in this franchise shall be deemed to diminish or affect the sanitary or police jurisdiction which the public authorities shall lawfully have over property in the city."

It would also appear that by the terms of the contract under which the construction work is being done by and on behalf of the Hudson and Manhattan Railroad Company, of which contract form a copy is on file with the Commission, that the contract is subject to the provisions of the franchise and of the certificate of the Board of Rapid Transit Railroad Commissioners granting the same, and that the provisions thereof are superior to and supercede any conflicting provisions of the contract, and that the contractor shall in the execution of the works and notwithstanding anything in the contract contained in all respects conform to the requirements of the franchise and certificate. The contract also provides that the methods of doing the work under the contract shall be subject to the approval of the board; that the contractor shall in all matters relating to the works conform to all valid regulations and requirements of law or of any State, municipal or other governmental or public authority; that the blasting shall be carried out with great care so as not to disturb any adjacent properties or improvements, either public or private, and that the contractor shall indemnify and save harmless the Hudson and Manhattan Railroad Company against and from all loss and damage arising from the failure of the contractor or of those acting under him to conform to the requirements of the said franchise and the provisions of the certificate granting such franchise, or to conform to the valid regulations and requirements of law or of any State, municipal or other governmental or public authority.

The Commission in the light of the above provisions can either itself investigate the complaint or call the matter to the attention of the tunnel company in accordance with the provisions of section 48 of the Public Service Commissions Act.

Yours very truly,
ABEL E. BLACKMAR,
Counsel to the Commission.

DUCTS FOR CABLES USED TO CONVEY ELECTRICITY FOR MANHATTAN-BRONX SUBWAY ARE PART OF CONSTRUCTION, NOT OF EQUIPMENT, THOUGH BUILT APART FROM SUBWAY WALL.

NEW YORK, *October* 2, 1907.

TRAVIS H. WHITNEY, Esq., *Secretary, Public Service Commission for the First District:*

DEAR SIR.— I return herewith letter of Mr. Rice, Chief Engineer, of August 28th, transmitted to me with your letter of September 4th. Mr. Rice asks for advice as to whether the ducts not forming part of the walls of the subway are to be treated as part of the construction or as part of the equipment under Contract No. 1.

When the contract for the construction and operation of the Manhattan-Bronx subway was made, the motive power to be used therein had not been determined, and was left open for further consideration, until late in 1901, when it was decided to use electricity and that the cables used for conveying it should be carried through ducts, the main part of which were built as part

of the subway wall, the subway being widened about eight inches to provide for those conduits. At some parts of the road, however, it was impracticable to build these ducts in the side walls, and they were in some places built over the roof of the subway and in others, as in the Park avenue tunnels, under the floor of the subway, all forming a continuous system.

The question whether ducts should be charged against construction has already been litigated, and was carried to the Court of Appeals (175 N. Y. 470), which decided, on the opinion of Judge Hatch below (80 App. Div. 210), that such work constituted construction and not equipment.

The argument in the Appellate Division was based largely on the question of the character of the ducts which were built as part of the subway wall, and the court confined itself almost entirely to the consideration of those ducts and did not consider the character of the ducts about which Mr. Rice now asks advice. I think, however, that they were also covered by this decision, for the corporation counsel conceded on the argument that the entire duct system was one thing or the other, either construction or equipment. I understand from Mr. Rice that these ducts are constructed in almost as permanent a fashion as those in the walls and can only be removed by doing considerable damage to the subway structure. It would manifestly be the cause of great difficulty if on the termination of the lease part of the duct system should be treated as construction and part as equipment, to be removed by the subway company or paid for by the city. These ducts form a complete system, and are all of a permanent character. They all, in my opinion, form part of the construction, and should be charged against that account * * *.

Yours very truly,
ABEL E. BLACKMAR,
Counsel to the Commission.

SUPPORT OF ADJACENT STRUCTURES BY CONTRACTOR FOR RAPID TRANSIT RAILWAY.

PROCURING ACCESS TO SAME.

October 8, 1907.

Brooklyn Loop (Manhattan) 9-0-2.

TRAVIS H. WHITNEY, Esq., *Secretary, Public Service Commission for the First District:*

DEAR SIR.— I am in receipt of your letter of September 24th, transmitting a communication of Mr. Rice, chief engineer, which forwarded to you a letter of H. C. Sanford, chief engineer of Degnon Contracting Company, the contractor for contract 9-0-2, Brooklyn loop, Centre street from Pearl to Canal streets, referring to an obstruction to access to property numbers 174–176 Canal street, needed for necessary shoring of the building. Mr. Sanford says that tenants refuse access to the property and that one Max Weil, who appears on the list as owner, gives no response to letters, and that the work of the

contractor is hampered by failure to get access to the building. Mr. Sanford also states that under his contract the city covenants to secure the right to construct a railroad free from the interference of abutting owners and asks the Commission to take the necessary steps so that the contractor may not be hampered by having access denied along the route where necessary for shoring purposes. Mr. Rice also intimates that some doubt exists as to the limits of jurisdiction of the Public Service Commission and of the building department, and that it is desirable that the authority of the Commission be definitely determined.

(1) The city's covenant referred to by Mr. Sanford is in words as follows (page 162 of the contract):

> "The city hereby stipulates and covenants to and with the contractor that the city will secure and assure to the contractor so long as the contractor shall perform the stipulations of this contract the right to construct and to operate the railroad as prescribed in this contract, free of all right, claim or other interference, whether by injunction, suit for damages or otherwise on the part of any owners, abutting owner or other person."

Among the stipulations which the contractor undertakes to perform are these (page 155):

> "The contractor admits and covenants to and with the city that the plans and specifications and other provisions of this contract for construction, if the work be done without fault or negligence on the part of the contractor, do not involve any danger to the foundations, walls or other parts of adjacent buildings or structures, and the contractor shall at his own expense make good any damage that shall in the course of construction be done to any such foundations, walls or other parts of adjacent buildings or structures or to navigation. But this covenant is not to be construed as applying to foundations, walls or other parts of buildings erected upon private property through which a railroad or any station entrance or approach shall be constructed."

And at page 156 as follows:

> "The contractor shall obey any order of the engineer to support or secure adjacent property or any surface or structure thereon, but the contractor shall not be relieved of responsibility either by compliance with any such order or by any failure or omission of the engineer to give any such order or to give notice of any danger."

The Building Code also provides in respect of the support of buildings as follows (chapter 15, the Building Code, section 22):

> "Whenever an excavation of either earth or rock for building or other purposes shall be intended to be, or shall be carried to the depth of more than ten feet below the curb, the person or persons causing such excavation to be made shall at all times, from the commencement until the completion thereof, if afforded the necessary license to enter upon the adjoining land, and not otherwise, at his or their own expense, preserve

any adjoining or contiguous wall or walls, structure or structures, from injury, and support the same by proper foundations, so that the said wall or walls, structure or structures shall be and remain practically as safe as before such excavation was commenced, whether said adjoining or contiguous wall or walls, structure or structures, are down more or less than ten feet below the curb. If the necessary license is not accorded to the person or persons making such excavation, then it shall be the duty of the owner refusing to grant such license to make the adjoining or contiguous wall or walls, structure or structures, safe, and support the same by proper foundations so that adjoining excavations may be made and shall be permitted to enter upon the premises where such excavation is being made for that purpose when necessary. * * * If the person or persons whose duty it shall be to preserve or protect any wall or walls, structure or structures, from injury shall neglect or fail so to do after having had a notice of twenty-four hours from the Department of Buildings, then the Commissioner of Buildings may enter upon the premises and employ such labor and furnish such materials and take such steps as in his judgment may be necessary to make the same safe and secure or to prevent the same from becoming unsafe or dangerous, at the expense of the person or persons whose duty it is to keep the same safe and secure."

The contract also contains a covenant which is in part as follows (page 159):

"It is the intent of this agreement that in addition to indemnifying the city against all claims for damages, the contractor shall also be liable to the owners of adjacent or abutting property or of buildings or structures thereon, and to all tenants of or persons in such buildings or structures, for all physical injuries to property or person which may be occasioned by the work of construction, even in cases where such owners, tenants or other persons have no legal claim against the city for such injuries. * * * In addition to all other liability for injuries to adjacent or abutting property or to buildings or structures thereon or for injuries to persons the contractor shall fully meet and duly pay the amount of any loss or damage that any abutting or other owners or other persons may suffer by reason of any physical injury to property or person occasioned by any act or omission of the contractor or of any subcontractor or other person employed on the work."

I think that under the foregoing provisions of the contract the contractor has undertaken that the work covered by the contract involves no danger to buildings, and that if support of adjacent buildings becomes necessary in the prosecution of his work, it is the contractor's duty to support the buildings and to procure the license from the adjacent owner referred to in the building ordinance above mentioned.

(2) The obligation of the city to secure and assure to the contractor the right to construct the railroad free from right, claim or other interference whether by injunction, suit for damages or otherwise, on the part of owners, abutting owners or other persons, does not require the Commission to put the contractor into physical possession of abutting property for the purpose of

underpinning the same, but requires the city to protect him, in the performance of his work, against injunction, suit for damages or otherwise.

(3) Under the case of *March* v. *The City*, 69 App. Div. 1, the contractor is justified in entering upon the property, and the courts would not enjoin such entry, but would leave the owner to his action for damages if there has been a technical trespass.

(4) In so far as these clauses in the contract above cited are for the benefit of the property owner or tenant, a refusal on their part to permit the contractor to protect the property would, I think, operate as a waiver.

(5) The provisions of the Building Code (section 22, chapter 15, of the ordinances of the city of New York) seem to be applicable to this situation and in effect are said so to be by the *per curiam* opinion in the March case. Recourse may, therefore, be had under the provisions of the Building Code to the Commissioner of Buildings, to secure the safety of the building at the expense of the party whose duty it is to keep the same safe and secure.

Very truly yours,

ABEL E. BLACKMAR,

Counsel to the Commission.

CONTRACTOR WHO DEPOSITED $1,000,000 CASH AS SECURITY FOR CONSTRUCTION OF BROOKLYN-MANHATTAN SUBWAY MAY NOT BE ALLOWED BY THE COMMISSION TO SUBSTITUTE FOR SAME A BOND — RAPID TRANSIT ACT, SECTION 38 — ELSBERG BILL (1906).

October 31, 1907.

Public Service Commission for the First District:

GENTLEMEN.— You have referred to me the request of the Subway Construction Company to substitute a bond in the place of $1,000,000 cash which was deposited by the contractor under contract number 2 for the construction of the so-called Brooklyn-Manhattan subway, as security for the construction agreement, with the request that I examine the same and advise as to procedure.

It seemed to me that there was a serious question as to the legality of such proposed action. I have therefore held the matter under advisement until the present time.

When contract number 2 was made, the law required a deposit of $1,000,000 in cash or securities as security for construction, but permitted the continuing security for rentals to become due and generally for the performance of the terms of the contract, to be made either in the form of a continuing bond or of a deposit of cash or securities.

A deposit of $1,000,000 in cash having been made under contract number 2, as security for construction, and also $1,000,000 more in securities as a continuing security, the contractor requested permission to file a continuing bond and to have the $1,000,000 deposited as continuing security released to him. A supplemental contract was thereupon made between the board and the contractor altering the terms of the original contract so as to require a continuing bond with sureties in the place of the deposit of securities, and said $1,000,000 in securities which had been lodged for a continuing deposit were returned to the contractor.

The contractor now requests that the $1,000,000 lodged as security for construction be returned upon a bond being given in its place, and the question is whether this may legally be done.

Assuming that this might legally be done as to a continuing security, it does not follow that the same power exists as to the security given for construction. The law in existence at the time the contract was made required a deposit of cash or securities to secure construction, but permitted either a deposit of cash or securities or a bond to be given for the continuing security.

Section 38 of the Rapid Transit Law authorized the board and the contractor to agree to a change in the provisions of the contract. It might therefore be held to follow that anything which could legally have been inserted in the original contract could be provided for in a supplemental one, and that in this manner a continuing bond could be substituted for the cash deposit and the cash returned. As, however, the law did not authorize a bond to be taken to secure construction in the first instance, it would seem to follow that unless there has been some change in the law this result cannot be accomplished by a supplemental contract.

The counsel for the contractor argue that under the Elsberg bill of 1906, the Commission has the discretion to accept a bond instead of a cash deposit as security for construction, and that therefore, under section 38, it may make a supplemental contract or change in the original contract substituting a bond for the cash, and providing for the return of the cash. If the Elsberg bill can be held to repeal or change the original law as applicable to contracts which had been executed before the Elsberg law was passed, this conclusion might possibly follow, but such is not the case.

Section 14 of the Elsberg law is as follows:

> "Nothing in this act contained shall repeal, modify or alter any provision of the act hereby amended in respect of any railway or railways constructed, constructing or contracted for thereunder when this act takes effect; but the act hereby amended shall be and continue in full force and effect in respect of such railway or railways so constructed, constructing, or contracted for, as if this act had not been passed."

This provision of the Elsberg law, which is not printed in the Rapid Transit Act, seems to me to be conclusive upon this subject.

My opinion therefore is that no change in the contract can be made by agreement, under section 38, which shall contain a provision which could not legally have been inserted in the original contract under the law then in existence. As the law required that the contract should provide for a deposit of cash or securities to secure the agreement for construction, and it did not authorize the taking of a bond for that purpose, it is not in my opinion competent to make a supplemental contract at this time which shall authorize the substitution of a bond for the cash deposit.

Yours very truly,

ABEL E. BLACKMAR,

Counsel to the Commission.

CONTRACTOR FOR CONSTRUCTION OF RAPID TRANSIT RAILWAY MUST SUPPORT STRUCTURES WHEN REACHED IN HIS WORK, THOUGH ERECTED AFTER MAKING OF HIS CONTRACT.

November 4, 1907.

TRAVIS H. WHITNEY, Esq., *Secretary, Public Service Commission for the First District:*

DEAR SIR.— I duly received your letter of September 23, transmitting a communication from Mr. Rice, chief engineer, dated September 20, as to underpinning the new buildings on the northeast corner of Mott and Delancey streets. This is in the portion of the Brooklyn loop lines to be built in the Delancey street extension, known as contract 9-0-4, let to the Bradley Contracting Company.

The duty of the contractor to support abutting structures and the obligations which he has assumed to adjacent property owners have been referred to in my opinions of October 8 and October 17, in the matter of No. 174 Canal street.

The question now arising is whether the obligations referred to exist under the contract as to new structures in a new street, *i. e.*, such as were not there when the contract was let and signed.

In view of the following provisions of the contract I am of the opinion that the contract must apply to these new structures and that the contractor is under obligation to support them in pursuance of the contract obligations.

The obligation of the contractor is to protect and support all buildings and other structures, including foundations (page 15) and including underpinning, wherever necessary, of all buildings affected or interfered with during construction of the railroad (page 17); as to excavation, contractor is to take special precaution where there is additional pressure due to the presence of buildings or other structures (page 56). Also when passing specially heavy buildings which, by their construction or position, might bring a great pressure upon the trenches, the right is reserved by the board for the engineer to direct that such buildings be underpinned (page 57). The contractor also covenants that his work, if done without fault or negligence on his part, does not involve any danger to foundations, walls or other parts of adjacent buildings or structures and that he will make good any damages that shall in course of construction be done to foundations, walls or other parts of adjacent buildings or structures (page 156); and the contractor also undertakes to obey any order of the engineer to support or secure adjacent property or any surface or structure thereon, but he is not relieved of responsibility either by compliance with an order of the chief engineer or an omission of the chief engineer to give it or to give notice of danger (page 157). The contractor also assumes a very extensive responsibility for all physical injuries to the property of abutting owners occasioned by any act or omission of himself or of any subcontractor or person employed on the work. The contract runs over a period before completion of at least twenty months.

It does not seem reasonable to assume that in a contract to extend over nearly two years in a crowded city street that the obligations of a contractor to abutting property owners and to adjacent property and structures can be limited to those in position at the time the contract is entered into and that the constant changes in condition of property in the ordinary course of busi-

ness and improvement for so long a period while the work is in progress are to be entirely ignored and the owner's rights completely passed over. I have advised you that in my opinion new water pipes put in by the city itself after the letting of a loop contract and requiring to be supported by the contractor as a subsurface structure should be deemed to be extra work, for which an additional allowance may be proper, but the city is a party to such contract and must be deemed to have expressed its intention as to its own rights and obligations.

In this case, however, as to abutting property owners, obligations are undertaken by the contractor for the benefit of third parties as a class who are not parties to the contract, and it would seem to me that the obligation which the contractor has assumed must include every person of that class, not as of the time the contract is signed, but of the time when his rights and property are touched in the prosecution of the contract.

I think, therefore, that the obligation of the contractor is to underpin and support any structures which may be found to need such support, new or old, at the time when such support becomes necessary by reason of the prosecution of his work.

If I am in error on this point the contractor has his remedy under the terms of the contract. In the new Fourth avenue contracts I have inserted a clause removing this uncertainty.

Very truly yours,
ABEL E. BLACKMAR,
Counsel to the Commission.

VAULTS IN FULTON STREET, BROOKLYN, TAKEN BY CONDEMNATION — RIGHTS OF ABUTTING OWNERS AS TO RESTORATION.

November 29, 1907.

Public Service Commission for the First District:

GENTLEMEN.— I have a letter of Mr. Norton, dated October 16, 1907, transmitting copy of a letter from Messrs. Jones, McKinny & Steinbrink, of October 15, in which letter they, as attorneys for the Sterling Piano Company, the owner of No. 518 Fulton street, Brooklyn, complain that the subway contractors, building the subway under Fulton street, have refused to restore the vault maintained by the Sterling Piano Company under its premises, and threatening that if such restoration is not made to its satisfaction, it will have the work done and hold the city responsible for the cost.

The matter of vaults under the sidewalks was before the Rapid Transit Board in a number of cases. There is a difference in the legal situation between Manhattan and Brooklyn, due to the fact that in Manhattan the city owns the fee of the streets while it does not in Brooklyn.

In answer to a number of complaints about interference with vault rights along Elm street in building the present subway, the counsel to the Rapid Transit Board advised that abutting property owners had merely revocable license to maintain these vaults and that all their rights ceased on being notified by the chief engineer that the space occupied by them was necessary for rapid transit purposes. In Brooklyn it was necessary to institute a condemnation proceeding to acquire an easement to operate a rapid transit railroad through and under Fulton street, in which the oaths of the con-

demnation commissioners were filed on June 2, 1903, and which proceeding is still pending.

In answer to several complaints made by property owners on Fulton street against interference with their vaults, the counsel to the board advised them of the institution of condemnation proceedings and referred them to the corporation counsel, evidently on the theory that these vault rights were covered by these proceedings. (Minutes, Rapid Transit Board, Vol. VI, pages 3584, 3700.)

In the case of the claim of the Sterling Piano Company, I find, on inquiry, that the only permit for vault privileges in connection with this building was one issued to C. F. Bond, president, on May 21, 1901, and that the subway, as originally planned, at this point, would take all of their vault space, but on the request of the Sterling Piano Company a further study of the plans was made, and it was found that by altering the design of the subway structure a space could be left over the roof of the depressed track of sufficient depth to permit them to still maintain a vault. This change was made to accommodate the Sterling Piano Company, but when it came to a question of restoring the vault they were not satisfied with the subcontractor's offer to restore it with glazed tiles, such as are used in the subway stations, but demanded that the vault be restored with a very expensive tile, such as was used in the vault prior to the building of the subway.

In view of these facts it seems to me,

First.— That such vault rights as these abutting property owners had were extinguished by the condemnation proceeding and that they were then placed in the same position as property owners in Manhattan whose vault licenses had been revoked and that if entitled to any compensation their remedy is through the condemnation proceeding which is still pending; and

Second.— That under the Rapid Transit Act the title to an easement through this vault vested in the city on the filing of the oaths of the condemnation commissioners on June 2, 1903, and that in maintaining such a vault without a further permit from the city the owner of the building is maintaining an illegal and unauthorized structure; and

Third.— That without reference to strict legal rights it is most unjust, where space for a vault remains, due to a change in the plans made to accommodate the property owner, that he should then seek to impose such an additional expense upon the city to restore a vault allowed him as a mere matter of favor.

I, therefore, desire to advise you that in my opinion the Sterling Piano Company, if it sees fit to restore this vault in the manner it proposes, has no right to impose the expense of doing it upon the city of New York.

Yours very truly,

ABEL E. BLACKMAR,

Counsel to the Commission.

RAPID TRANSIT ACT — JURISDICTION OF PENNSYLVANIA TUNNEL.

December 16, 1907.

Public Service Commission for the First District:

DEAR SIRS.— I return herewith letter of Mr. Walter B. James of the 6th inst., complaining of the condition of East 33d street, in the borough of

Manhattan, between First avenue and the East river, and of the condition of Seventh and Eighth avenues between 32d and 33d streets, at both of which points the Pennsylvania, New York and Long Island Railroad Company is engaged in constructing a subway, which letter was referred to me for an opinion whether the Commission had jurisdiction to act upon this complaint.

The so-called Pennsylvania tunnel is being constructed under a certificate granted by the former Rapid Transit Board to the Pennsylvania, New York and Long Island Railroad Company, dated October 9, 1902, which contained the following provisions germane to this complaint:

> Paragraph VI, page 18. "The tunnel company shall at all times keep paved with smooth pavement in such manner as may be reasonably required by the municipal authorities having care of the streets, and shall at all times keep in thoroughly good condition the portions of 31st and 33d streets between Seventh and Eighth avenues and between Eighth and Ninth avenues."
>
> Paragraph VI, page 19. "All plans for, and the method of doing, the work shall from time to time be subject to the approval of the board."
>
> Paragraph XIII, page 20. "The city, the board and all duly authorized representatives of the city, shall have the right at all reasonable times to inspect the railroad and any part thereof, and to enter thereon when necessary for the examination, supervision or care of any property of the city or for any proper purpose."

From these franchise provisions it seems to me to be plain that the construction of this tunnel is at all times subject to the jurisdiction of the Commission as the successor of the Rapid Transit Board, and that the Commission has complete power to order the railroad company or its contractors to live up to their franchise covenants.

In this connection, I think it well to call the attention of the Commission to the fact that for certain portions of the work the Rapid Transit Board on February 14th last granted to the railroad company the right to make excavation from the surface on certain portions of the line. These permits were four in number and allowed excavation from the surface at the following places:

From a point on West 33d street 460 feet west of Sixth avenue, for not more than 500 feet running east.

From a point on West 33d street 20 feet west of Fifth avenue, for not more than 600 feet running west.

From a point on West 32d street 200 feet west of Madison avenue, for not more than 650 feet running west.

And from a point on West 33d street 600 feet west of Sixth avenue, for not more than 750 feet running east.

These permits expressly provide that temporary street surfaces shall be maintained and that upon the completion of the work they shall be replaced with asphalt subject to the specifications of the Bureau of Highways.

At the time of granting these permits, the following resolution was adopted (Rapid Transit Minutes, page 4686):

> "Resolved, That this board hereby directs its chief engineer to maintain a constant supervision of the method and progress of the work of

construction, etc., under the permits this day authorized to be granted to the Pennsylvania, New York and Long Island Railroad Company."

Although repaving is required by the provision above quoted to be done in such manner as may be reasonably required by the municipal authorities, I do not think that this ousts the Commission of its right of regulation, but that the Rapid Transit Board, by the terms of the franchise, gave concurrent rights of regulation in some respects to the other city authorities. Section 32 of the Rapid Transit Act, under which the Rapid Transit Board acted in granting this certificate, provides that the board shall fix and determine the locations and plans of construction of the railroad and to include in the contract such terms, conditions and requirements as to the board may appear just and proper. The act further provides that such grant shall be deemed a contract between the city and the railroad company.

As the railroad company has, therefore, agreed with the city through the Rapid Transit Board in the particulars above specified, this Commission has, in my opinion, the right to compel the railroad company to live up to such agreements.

Yours very truly,
ABEL E. BLACKMAR,
Counsel to the Commission.

RAPID TRANSIT SUBWAYS — MODIFICATION OF CONTRACT — RAPID TRANSIT ACT, SECTION 38, ELSBERG BILL.

December 17, 1907.

Public Service Commission for the First District:

GENTLEMEN.— I have been asked to advise the Commission whether a change can be made in the location of the subway structure of the Brooklyn and Manhattan loop in Centre street by supplemental contract with the contractors and without securing the consent of the Board of Estimate and Apportionment and of the abutting property owners.

Under section 38 of the Rapid Transit Act, the Commission, as successor to the Board of Rapid Transit Railroad Commissioners, may, from time to time, with the consent of the bondsmen or sureties of the contractor, agree with the contractor upon changes in and modifications of the contract or the plans and specifications upon which the road is to be constructed. It is, however, provided therein that no change or modification in the plans and specifications consented to and authorized pursuant to section 5 of the act, shall be made without the further consent and authorization provided for in said section.

The consent and authorization last herein mentioned refers to the consent of the Board of Estimate and Apportionment and of the abutting property owners. Section 4 provides that the general plan shall show the mode of operation and contain such details as to manner of construction as may be necessary to show the extent to which any street, avenue or other public place is to be encroached upon and the property abutting thereon affected. We have, therefore, to determine whether this proposed modification alters

the extent to which the street is to be encroached upon and the abutting property thereon affected, as shown in the general plan of the route, as it was originally consented to by the municipal authorities and authorized by the Appellate Division.

The case of the Park avenue deviation has been several times before the court. The maps and drawings of route No. 1 were, by resolution of the Board of Rapid Transit Railroad Commissioners, passed on February 4th, incorporated in and made a part of the resolution showing the route and general plan. These drawings showed that the tunnel was to be located thirty-five feet easterly from the easterly side of Park avenue, and as they were a part of the resolution adopting the route and general plan, they determined the extent to which Park avenue could be legally encroached upon and the rights of abutting property owners legally affected. Subsequently, the location of the subway was changed without the consent of the municipal authorities or the abutting property owners, so that the easterly wall thereof was within seven feet of the easterly side of Park avenue. The court held that this deviation from the route was illegal. I have, therefore, examined the resolutions and the maps and plans establishing route No. 9, namely, the route through Centre street, to determine if they are so drawn as to restrict or limit the extent to which Centre street may be used for subway construction, either as against the city or as against the abutting property owners.

The general route through Centre street, as laid out by the Board of Rapid Transit Railroad Commissioners, locates the subway generally in Centre street. The plan of construction provides that there shall be four tracks in Centre street; that the tracks shall be placed in general under the center of the longitudinal streets, as far as practicable and convenient, but if required may be diverted to one side or the other of such longitudinal streets; that the roof of the tunnel shall be as near the surface as street conditions and grades will conveniently permit; that the tunnels above described shall in no case be less than thirteen feet in height in the clear; that there shall be a width in the tunnels not exceeding fifteen feet for each track in addition to the thickness of the supporting walls, except that at stations, switches, turnouts, curves and cross-overs the width may be increased; that stations and station approaches shall in general be at the intersection of streets and shall be built under or over the streets and immediately adjoining private abutting property, or through private property, or both under or over the streets and through private property; that wherever it shall be necessary for the proper maintenance of pipes or other subsurface structures, the width of the tunnel may be enlarged on either or both sides by an additional width on either side of the route not to exceed fifteen feet. These are the substantial limitations upon the right to use the street and to affect abutting property which I find in the general plan. Drawings were also annexed and presented to the Board of Estimate and Apportionment and the Appellate Division, but by resolution of the Board of Rapid Transit Railroad Commissioners it was expressly provided that they were adopted for convenience merely and not to be deemed a part of the description of the routes or a part of the general plans for any purpose whatever.

Up to this point this opinion has been devoted to the inquiry whether it is necessary to submit any modification of this contract to the Board of Esti-

mate and Apportionment under the proviso contained in section 38, on the ground that such change involves a modification of the original route and general plan.

It still remains to consider whether the provisions of section 37 require that an amendatory contract should be submitted to the Board of Estimate and Apportionment. Such section provides for the application to the Board of Estimate and Apportionment to fix the amount of bonds to be sold for the purpose of furnishing money to carry out the contract. It further provides that the amount of bonds shall not exceed the limit prescribed by the Board of Estimate and Apportionment, and

> "No contract for the construction of such road or roads shall be made unless and until such board of estimate and apportionment or such other local authority shall have consented thereto and prescribed a limit to the amount of bonds available for the purposes of this section, which shall be sufficient to meet the requirements of such contract in addition to all obligations theretofore incurred and to be satisfied from such bonds."

To determine whether this provision requires a submission of such modifying contract, it is necessary to trace the history of the law in this respect. Prior to 1904, the Rapid Transit Act provided that the total amount of bonds to be sold without the consent of the Legislature first having been obtained should not exceed fifty millions of dollars, with a possible increase of five million dollars for the acquirement of necessary lands and easements. In that year, for the purpose of permitting other and additional rapid transit contracts to be made, this provision was repealed, and in the place thereof was enacted the provision hereinabove quoted.

In 1906, the Elsberg bill was passed, which referred the matter to the Board of Estimate and Apportionment, to decide whether the contract should be one for construction, equipment and operation, or for construction and equipment, or for construction only, and the provision already above quoted was continued in the law. At the time of the enactment of the Elsberg bill and as part of the same bill, section 38 was also amended by striking out the word "and" in such section and inserting the word "or" in its place, thus showing the legislative intent to continue section 38 in full operation.

The conclusion which I draw is, that the above quoted provisions of section 37 refer to contracts which require the appropriation of money and do not refer to a modification of the contract which does not increase the cost of the work of the subway. When the clause limiting the total amount of bonds which could be sold for rapid transit purposes was repealed, it was the apparent legislative intent to commit to the Board of Estimate and Apportionment the final determination of the amount of money to be used for rapid transit construction, and to that end it provided that contracts for construction should be presented to the Board of Estimate and Apportionment, so that such board might base upon such contracts their determination as to the amount of money to be expended.

I, therefore, am of the opinion that it is not necessary to present any modifying contract to the Board of Estimate and Apportionment and obtain their consent thereto, unless either such modifying contracts, first, contain a modification of the route and general plan originally consented to by the

Board of Estimate and Apportionment and by the property owners or the Appellate Division, or second, require the expenditure of a larger sum of money.

I wish also to call your attention to the fact that it will be necessary to agree with a number of different contractors before this modification can be carried out, and any of them can, by refusing to consent, put a practical veto along the whole route. This proposed modification is not such as could be carried out by the mere direction of the engineer under the provisions of the contract.

Very truly yours,
ABEL E. BLACKMAR,
Counsel to the Commission.

SUPREME COURT — APPELLATE DIVISION, THIRD DEPARTMENT.

Argued September Term.
247 — 90
Decided November Term.

In the Matter of the Complaint of the TRUSTEES OF THE VILLAGE OF SARATOGA SPRINGS, Respondents,
against
THE SARATOGA GAS, ELECTRIC LIGHT AND POWER COMPANY, Appellant.

SMITH, P. J.

CHESTER, KELLOGG, COCHRANE, SEWELL, *Associate Justices.*

Appeal by the Saratoga Gas, Electric Light and Power Company, from an order made and entered by the Commission of Gas and Electricity, upon the 29th day of June, 1907. This order fixes the maximum price which the appellant could charge for gas at $1.45 per thousand cubic feet, and the maximum price which appellant could charge for an electric current at eight cents per kilowatt hour.

The proceeding arose under chapter 737 of the Laws of 1905, creating the Commission of Gas and Electricity and prescribing its powers and duties. Under section 15 of that act the trustees of the village of Saratoga Springs made complaint in writing that the price charged for gas and electric current by the defendant was excessive. Notice was given, pursuant to section 17 of the act, and after a hearing duly had, the order was made from which this appeal was taken. Further facts appear in the opinion.

APPEARANCES.

For the Appellant, Edgar T. Brackett (John B. Stanchfield, of counsel).

For the Respondent, Frank Gick (John L. Henning, of counsel).

BRIEFS were submitted by the Attorney-General and by the Public Service Commission for the second district of the State.

SMITH, P. J.— This Commission has assumed to fix a maximum charge for gas and electricity within the village of Saratoga Springs. By this appeal their right so to do is challenged, upon the ground that such power is legislative and cannot be delegated to a commission. The question raised is an important one, as it goes to the foundation of a policy which has been adopted by the State, and which, if such power be denied, is of little efficacy. That the power to fix a tariff of rates for a Public Service Corporation is executive, will not be contended. That such power as an original power is not judicial, will be admitted. In *Interstate Commerce Commission* v. *Railway Co.*, 167 U. S. 499, Justice Brewer in writing for the court says: "The power to establish a tariff of rates for carriage and by a common carrier, is a legislative and not an administrative or judicial function." In *C., B. & Q. R. R. Co.* v. *Jones*, 149 Ill. 377, it is said: "The power to regulate and control the charges of railroad companies or other agencies engaged in public employments is legislative and not judicial." Further authority might be cited to the same effect. The pivotal contention here is as to whether this function is so purely legislative that it cannot in any degree be delegated to an administrative body as a commission named, as provided in this statute.

In determining this question, we are aided by well considered authority. In *Stone* v. *Farmers' Loan and Trust Co.*, 116 U. S. 307, decided in 1886, the action was brought by the Farmers' Loan and Trust Company to enjoin the Railroad Commission of Mississippi from enforcing against the Mobile and Ohio Railroad Company the provisions of the Statute of Mississippi, entitled "An act to provide for the regulation of freight and passenger rates on railroads in this State, and to create a commission to supervise the same." It was claimed in that case that the act conferred both legislative and judicial powers on the Commission, in violation of the Constitution of Mississippi. The Supreme Court of the United States reversed the decree of the Circuit Court, and remanded the cause with instructions to dismiss the bill. In *State of Minnesota* v. *Railway Co.*, 38 Minn. 281, the statute of the State had created a railroad and warehouse Commission with authority to determine reasonable and just rates for transportation of freight and passengers by the roads with the State. The respondent railroad company had refused to comply with the order of the Commission as to the rate fixed. Proceedings were commenced to enforce obedience. The court held: "The authority thus given to the Commission to determine in the exercise of their discretion and judgment what are equal and reasonable rates, is not a delegation of legislative power." In discussing this objection Mitchell, J., in writing for the court says: "The difference between the power to say what the law shall be and the power to adopt rules and regulations, or to investigate and determine the facts in order to carry into effect a law already passed is apparent. The true distinction is between the delegation of power to make the law which necessarily involves a discretion as to what it shall be, and the

conferring an authority or discretion to be exercised under and in pursuance of the law." After discussing the necessity of leaving the application of such a law to some administrative body, the opinion proceeds: "The Legislature itself has passed upon the expediency of the law and what it shall be. The Commission is intrusted with no authority or discretion upon these questions. It can neither make nor unmake a single provision of law. It is merely charged with the administration of the law and with no other power. Whether the charges of a railway in any particular case are or are not equal and reasonable is a fact left by the law for them to determine. If the Commission find them unequal and unreasonable, and declare other rates to be equal and reasonable, the law itself declares the former unlawful, and allows the railway to charge only the latter." The writ of mandamus asked for was awarded. This case was carried to the United States Supreme Court and is there reported in 134 U. S. 418. The case was there reversed, upon the ground that the Supreme Court of Minnesota had held that the statute precluded any judicial review of the determination of the Commission. No question was made as to the validity of the delegation of such power, if the right of judicial review had not been taken away. Justice Miller, in writing a concurring opinion, stated two propositions of law. First, "In regard to the business of common carriers limited to points within a single State, that State has the legislative power to establish the rates of compensation for such carriage. Second, The power which the Legislature has to do this can be exercised through a Commission which it may authorize to act in the matter, such as the one appointed by the Legislature of Minnesota by the act now under consideration." Justice Bradley wrote a dissenting opinion in that case, in which Justices Gray and Lamar concurred. In that dissenting opinion he said: "I think it is perfectly clear, and well settled by the decisions of this court, that the Legislature might have fixed the rates in question. If it had done so, it would have done it through the aid of committees appointed to investigate the subject, to acquire information, to cite parties, to get all the facts before them, and finally to decide and report. No one could have said that this was not due process of law. And if the Legislature itself could do this, acting by its committees, and proceeding according to the usual forms adopted by such bodies, I can see no good reason why it might not delegate the duty to a board of commissioners, charged as the board in this case was, to regulate and fix the charges, so as to be equal and reasonable * * *. In the Railroad Commission Cases, 116 U. S. 307, we held that a board of commissioners is a proper tribunal for determining the proper rates of fare and freight on the railroads of a State. It seems to me, therefore, that the law of Minnesota did not prescribe anything that was not in accordance with due process of law in creating such a board, and investing it with the powers in question."

In *Field* v. *Clark*, 143 U. S. 649, decided in 1892, the court had under consideration provisions of an act of Congress authorizing the President to suspend by proclamation the free introduction of certain commodities when he became satisfied that any country producing such articles imposed duties or other exactions upon the agricultural or other products of the United States which he may deem to be reciprocally unequal or unreasonable. In this case the Supreme Court held that Congress could not under the Constitution delegate its legislative power to the President, but that the provision referred to

was not a delegation of legislative power. The principles there enunciated are in line with the reasoning of the cases before quoted.

In *N. Y. & N. E. Ry. Co.* v. *Town of Bristol*, 151 U. S. 556, the head note in part reads: "Railroad corporations are subject to such legislative control as may be necessary to protect the public against danger, injustice or oppression; and this control may be exercised through a board of commissioners." In that case the court had under review a statute of the State of Connecticut relating to railway grade crossings.

In *Reagan* v. *Farmers' Loan and Trust Co.*, 154 U. S. 362, decided in 1894, the court had under review a statute of the State of Texas, which created a railroad commission with various powers, among others the right to regulate rates and charges for transportation. The Circuit Court restrained the railroad commission from establishing any rates whatsoever, under and by virtue of the act. The Supreme Court reversed the decree in so far as it restrained the railroad commission from establishing rates and regulations, but sustained the decree as to certain powers given by the act. In referring to other provisions of the act, Justice Brewer, in writing for the court, says: "Applying this rule, the invalidity of these two provisions may be conceded without impairing the force of the rest of the act. The creation of a commission, with power to establish rules for the operation of railroads and to regulate rates, was the prime object of the Legislature. This is fully accomplished whether any penalties are imposed for a violation of the rules prescribed, or whether the rates shall be conclusive or simply *prima facie* evidence of what is just and reasonable."

In *Interstate Commerce Commission* v. *Cincinnati*, etc., 167 U. S. 479, decided in 1897, it was decided that the Interstate Commerce Commission was not authorized under the act, expressly or impliedly, to fix and establish rates. Justice Brewer writes this conclusion after an extended argument. The decision assumes that if that power had been given, it would have been constitutional.

In *San Diego Land and Town Co.* v. *National City*, 174 U. S. 739, decided in 1899, the Legislature of California had authorized the board of aldermen, or other legislative body of any city or county, to fix the rates to be charged by water companies for the furnishing of water. This statute was held constitutional.

In *C., M. & St. P. Ry. Co.* v. *Tompkins*, 176 U. S. 167, decided in 1900, the Legislature of South Dakota had provided for the appointment of a board of railroad commissioners and had authorized such board to make a schedule of reasonable maximum fare and charges for the transportation of passengers, freight and cars on the railroad within the State. The railroad commission had made a schedule, and the bill was filed in the Circuit Court to restrain the enforcement of the schedule. The complaint made was that the rates were unjust and unreasonable. The Circuit Court dismissed the bill. This decree, however, was reversed by the United States Supreme Court, and the case remanded to a competent master, to report fully upon the facts. This direction would have been wholly unnecessary if the act had been unconstitutional, as is claimed by the appellants here.

In *Minneapolis and St. Louis R. R. Co.* v. *Minnesota*, 186 U. S. 257, decided in 1902, the court had under consideration the act of the Legislature of the State of Minnesota, creating a railroad and warehouse

commission, and authorizing that commission to fix rates. The action was brought to compel the plaintiff in error to comply with those rates. The decree was rendered as asked in the Supreme Court of Minnesota, and the decree of that court was affirmed by the United States Court. In this case the constitutionality of the act was not discussed, but was assumed.

In *Stanislaus County* v. *San Joaquin, etc., Co.*, 192 U. S. 201, decided in 1904, a Statute of California permitting boards of supervisors to fix water rates, was sustained. In *Buttfield* v. *Stranahan*, 102 U. S. 470, the act of Congress known as the Tea Inspection Act was under examination. That act authorized the secretary of the treasury to establish fixed and uniform standards of purity, quality and fitness for consumption. The court held that the statute was not unconstitutional as vesting an executive officer with legislative power. Justice White, in writing for the court, said: "We may say of the legislation in this case, as was said of legislation considered in *Field* v. *Clark*, that it does not in any real sense, invest administrative officials with the power of legislation. Congress legislated on the subject as far as was reasonably practicable, and from the necessity of the case was compelled to leave to executive officials the duty of bringing about the result pointed out by the statute. To deny the power of Congress to delegate such a duty would, in effect, amount but to declaring that the plenary power vested in Congress to regulate foreign commerce could not be efficaciously exerted. * * * The claim that the statute commits to the arbitrary discretion of the secretary of the treasury the determination of what teas may be imported, and, therefore, in effect vests that official with legislative power, is without merit. We are of opinion that the statute, when properly construed, as said by the Circuit Court of Appeals, but expresses the purpose to exclude the lowest grades of tea, whether demonstrably of inferior purity, or unfit for consumption, or presumably so because of their inferior quality. This, in effect, was the fixing of a primary standard, and devolved upon the secretary of the treasury the mere executive duty to effectuate the legislative policy declared in the statute.

In *Atlantic Coast Line* v. *Florida*, 203 U. S. 256, decided in 1906, a statute of Florida was held constitutional, which created a board of railroad commissioners, and provided that the rates for transportation as fixed by that board should be *prima facie*, just and reasonable. The same rule was held in *Seaboard Air Line Ry.* v. *Florida*, 203 U. S. 261.

In *Union Bridge Co.* v. *United States*, 204 U. S. 364, decided in 1907, the head note in part reads: "Congress in enacting that navigation be freed from unreasonable obstructions arising from bridges which are of insufficient height or width or span, or are otherwise defective, may without violating the constitutional prohibition against delegation of legislative or judicial power, impose upon an executive officer the duty of ascertaining what particular cases come within the prescribed rule." The opinion states with approval the remarks of Chief Justice Marshall in *Wayman* v. *Southard*, 10 Wheat. 1, to the effect that although Congress could not delegate to the courts or to any other tribunal powers strictly and exclusively legislative, and although the line had not been exactly drawn that separates the important subjects which must be entirely regulated by the Legislature itself from those of less interest "in which a general provision may be made, and powers given to those who are to act under such general provisions to fill up the details," yet "Con-

gress may certainly delegate to others, powers which the Legislature may rightfully exercise itself," and "the maker of the law may commit something to the discretion of the other departments."

In *Atlantic Coast Line R. R. Co.* v. *North Carolina Corporation Commission*, 206 U. S. 1, decided in 1907, the statute of North Carolina created a corporation commission with power to fix rates. The plaintiff had questioned the power which had been sustained by the Supreme Court of North Carolina. The Supreme Court of the United States affirmed the decision of the State Court. Mr. Justice White in writing for the court says: "The elementary proposition that railroads from the public nature of the business by them carried on and the interest which the public have in their operation are subject, as to their State business, to State regulation, which may be exerted either directly by the legislative authority or by administrative bodies endowed with power to that end, is not and could not be successfully questioned in view of the long line of authorities sustaining that doctrine."

In *Chicago & N. W. Ry. Co.* v. *Railway Commissioners*, 35 Fed. Rep. 866, the court had under review an act of the State of Iowa, authorizing railroad commissioners to fix maximum charge for transportation. The opinion was written by Mr. Justice Brewer. In part he says: "Hence counsel conclude that the Legislature is the only body which can fix rates, and that it may not abdicate its functions and delegate this legislative power to another body. Of course, this question is pivotal; for if the Legislature alone can fix rates, the railroad commissioners are exercising functions which do not belong to them; and if the rates proposed infringe upon the property rights of the complainant, it may insist that such unauthorized action of the commissioners be stayed. * * *. There is no inherent vice in such a delegation of power; nothing in the nature of things which would prevent the State, by constitutional enactment at least, from intrusting these powers to such a board; and nothing in such constitutional action which would invade any rights guaranteed by the Federal Constitution." It will be noticed that Justice Brewer, who wrote in this case, eight years later wrote the opinion in the Interstate Commerce Commission case above cited, in which he assumes the constitutionality of such delegated power. Similar holdings are found in *Tilley* v. *Savannah, Florida and Western R. R. Co.*, 5 Fed. Rep. 641; *New Memphis Gas and Light Co.* v. *City of Memphis*, 72 Fed. Rep. 952. In *People* v. *Harper*, 91 Ill. 356, the court states the first point urged that the authority granted to the railroad and warehouse commissioners by the State of Illinois to fix the rates for charges for the inspection of grain and compensation of officers, is an unwarrantable delegation of legislative power. In that case the validity of the statute was upheld.

In *C., B. & Q. R. R. Co.* v. *Jones*, 149 Ill. 361, a statute of the State of Illinois, authorizing the board of railroad commissioners to fix rates, was upheld. The opinion in part reads: "It has been held in a number of cases, that statutes, which create boards of commissioners and authorize them to make schedules of rates for railroad companies, are not invalid for the reason here urged. The doctrine of these cases is, that the functions of such boards are administrative rather than legislative; that the authority conferred upon them relates merely to the execution of the law; that a grant of legislative power to do a certain thing carries with it the power to use all proper and necessary means to accomplish the end, and that, as the reasonable-

ness of rates changes with circumstances and Legislatures cannot be continuously in session, the requirement that the statute itself shall fix the charges, might preclude the Legislature from the use of the agencies necessary to perform the duty imposed upon it by the Constitution; in short, that the Legislature may authorize to do things which it might properly, but cannot conveniently or advantageously do itself.

In *State of Minnesota* v. *Great Northern Ry. Co.*, 111 N. W. Rep. 289, the statute of Minnesota authorizing the railway commission to determine whether a railway corporation may increase its stock, was under consideration. That part of the statute was held to be unconstitutional, because the matter was left entirely to the discretion of the railway commission without any standard by which they should be guided, and it was thus held to be a delegation of legislative power. The head note in part reads: "In the exercise of this right the Legislature may enact a statute providing generally for what purposes and upon what terms, conditions and limitations an increase of capital stock may be made, and confer upon the commission the duty of supervising any proposed increase. It may also delegate to the commission the duty of finding the facts in each particular case, and authorize and require it if it finds the existence of facts that bring the case within the statute, and allow the proposed increase; otherwise to refuse it." In the opinion we find: "The rule was reaffirmed in the case of *State ex rel.* v. *Ry. Co.*, 38 Minn. 281. The statute considered in that case, section 8, chapter 10, Laws of 1887, which authorized the railroad and warehouse commission to find and determine whether the tariffs of rates, fares, charges or transportation, or any part thereof, filed or published by any common carrier, were equal and reasonable, and if they were not, to compel the carrier to make them so. The question whether this statute delegated legislative power to the commission was raised, and this court held that there was no attempt to delegate to the commission the power to determine what the law should be, and that in this respect the statute was constitutional. After quoting from the opinion of Justice Mitchell in that case, the opinion proceeds: "The court then proceeded to apply the test indicated to the statute then under consideration, and held that it did not attempt to delegate legislative powers to the commission, or to invest it with any discretion as to what the laws should be, but simply charged it with the administration of the statute, which became a complete law upon its enactment. Or, in other words, the Legislature by the statute declared that all freight and passenger rates should be equal and reasonable, and merely imposed upon the commission the administrative duty of determining whether the charges of a carrier in any particular case were or were not unequal or unreasonable; that is to determine whether it was or was not obeying the law, and, if not, to compel its obedience by enforcing rates which the facts found might show to be reasonable."

The same rule has been held in *State of Nebraska* v. *The Fremont, Elkhorn and Missouri Valley Railroad Company*, 22 Neb. 313; in *Georgia Railroad* v. *Smith et al. Railroad Commissioners*, 70 Ga. 694; in *McWhorter et al., as Railroad Commissioners of Florida* v. *The Pensacola and Atlantic Railroad Co.*, 24 Fla. 417; in *Stone* v. *Y. & M. V. R. R. Co.*, 62 Miss. 607; in *Atlantic Express Co.* v. *Wilmington and Weldon R. R. Co.*, 111 N. C. Rep. 463. In the brief presented by the Public Service Commission is also found a quotation from the opinion given by Attorney-General Moody to Congress, in which he reaches two conclusions:

"1. There is a governmental power to fix the maximum future charges of carriers by railroads vested in the Legislatures of the States with regard to transportation exclusively within the States, and vested in Congress with regard to all other transportation."

"2. Although legislative power, properly speaking, cannot be delegated, the lawmaking body, having enacted into the statute the standard of charges which shall control, may intrust to an administrative body not exercising in the true sense judicial power the duty to fix rates in conformity with that standard." In the same brief twenty-two States are named which have similar statutes.

In the courts of this State this question has not been directly decided, but the principle is, I think, established in analogous cases. (See *Matter of N. Y. Elevated R. R. Co.*, 70 N. Y. 327; *Matter of Gilbert Elevated Ry. Co.*, 70 N. Y. 361; *People ex rel. Steward*, 160 N. Y. 202; *People* v. *Long Island R. R. Co.*, 134 N. Y. 506.)

It will thus be seen that the assumption of this power by the Commission is justified by convincing authority. Not a decision is cited in the State or Federal Courts which questions the power provided the determination of the commissioners is directed by some standard which is presented in the statute.

It is strangly insisted that the statute fixes no such standard. If in this the appellant be correct, the authorities cited are claimed to establish the unconstitutionality of the act. The power of the Commission is given in these words: "After such hearing and upon investigation as may have been made by the Commission, or its officers, agents or inspectors, the Commission within the limits prescribed by law may fix the maximum price of gas or electricity, which shall be charged by such corporation or person in such municipality * * *." The commissioners are not required in explicit terms to fix a reasonable rate, nor a just rate, nor an equal rate. They are given no standard as a percentage of profits, by which they are to fix the rate. Their only guide is to fix the rate "within the limits prescribed by law." The law is settled by repeated adjudication that the Legislature itself cannot fix a rate which would be confiscatory of the property of the corporation. The law is equally well settled that a Public Service Corporation has not the right of a purely private corporation, to charge what it will for its product, but must serve the public at just and reasonable rates. In *Brooklyn Union Gas Co.* v. *State of New York*, 115 App. Div. 70, Judge Gaynor in writing for the Appellate Division of the Second Department says: "The rule is that Public Service Corporations may charge only a reasonable rate and the courts may ascertain such rate in a given case." (See also *Killmer* v. *N. Y. C. R. Co.*, 100 N. Y. 395.) The determination of this Commission is made subject to review by the Appellate Division, which must be guided in its review by what shall upon the evidence appear to be a reasonable rate, which the public have the right to demand and which shall not be so low as to render valueless the property of the corporation. With the law thus established and the rule defined under which their decisions must be tested upon an appeal, the words "within the limits prescribed by law" can have only one significance. The standard which is to guide this Commission in the exercise of its administrative duties in fixing rates is a reasonable charge for the product of the Public Service Corporation, one reasonable to the public and reasonable to the corporation. Such a standard is sufficiently defined within the authorities which have been referred to.

But it is insisted by appellant that without these words in the statute, the Commission would be required to fix the rates within the limits required by law, and that such words, therefore, add nothing to the statute and fix no standard which the Commission would not otherwise have. The rate when fixed by the Legislature, cannot be reduced by the court as in excess of reasonable charges (*Brooklyn Gas Co.* v. *City*, 188 N. Y. 334). Without these words of limitation, the act might be deemed to give to the Commission the power possessed by the Legislature. A complete answer, however, is that it cannot matter whether the standard by which the Commission is to be guided, be fixed by common law or by the statute. In either case no legislative discretion is delegated to the Commission. Without such discretion, their functions will be held administrative and not legislative.

The appellant makes further criticism of this statute upon the ground that the Commission is authorized to receive *ex parte* and hearsay evidence and to base its decision thereupon and that the court review provided is only from a determination so made. But this procedure the Legislature could adopt. Such legislative power as is delegated to boards of supervisors may be so exercised. In proceedings for equalization of taxes by the State board of assessors evidence which would not be admissible in a court of law is admissible upon which they may base their determination. It will not be questioned that the appellant's property can only be taken by due process of law. To make effectual this constitutional protection the appellant must have the right to appeal to the court whenever it is claimed that its constitutional rights are invaded. By the statute itself an appeal is given to the Appellate Division of the Supreme Court from the determination of this Commission. That appeal must be heard upon the record and the determination upon that appeal must be upon what after full disclosure by the service corporation is shown by fair proof to be the rate which ought reasonably to be charged. It is contended that this right of appeal does not give to appellant the protection guaranteed by the constitution as this review must be of a determination made partly upon hearsay evidence. Granting for the argument that the right of appeal given by this statute is not adequate to preserve to the corporation its constitutional protection in that case it must be held that the right of appeal is not an exclusive remedy, but that concurrent therewith there is at all times the right of the corporation to proceed by affirmative action to enjoin the enforcement of the Commission's order. In such an action the rights of the corporation can be certainly safe-guarded. Our duty has been many times declared to so construe a statute, if possible, as to conform a constitutional requirement, and to disregard such parts of a statute as are in violation thereof where the statute is separable and a substantial part thereof was lawfully enacted.

Again, the act requires that the price thus fixed by the Commission "shall be the maximum price to be charged by such person or corporation for gas or electricity in such municipality for a term of three years," and thereafter until upon complaint the Commission shall fix a new price. It is insisted that this refuses to the corporation the equal protection of the law, and makes a rate which may within that three years become confiscatory by reason of an increase in price of materials used in making gas and electricity. But to this it may be answered that if such prices were fixed by the Legislature itself it must remain a maximum price until the Legislature should again

meet, unless modified by the court, at which time an application might be made for a modification thereof. So here the corporation may apply to the Legislature at any time for relief. Moreover the affirmance by the court of the rate fixed by the Commission is simply an affirmance of the reasonableness of that rate at the time of the determination. If at any time thereafter facts should arise which would make such rates confiscatory the courts are always open to relieve the service corporation or person from the restriction of those rates. It would have been better if the act had provided for a remedy by the Commission itself upon an application by the service corporation, in case of a change in conditions, but as it is, the provision that the rate fixed shall continue for three years, is harmless to deprive the corporation of its right of property, because of the right still left in the corporation to apply either to the Legislature or to the court for relief.

It is unnecessary here to consider the criticism of the act as to the original power given to the court on appeal. That question will become material only when the court assumes to exercise some such power; nor is it necessary to consider the criticism as to the unreasonableness of the penalty whereby for an over-charge, the just claim for compensation is forfeited. If invalid it does not affect those provisions of the act which govern the determination of the order here appealed from. After considering all of the objections urged, our conclusion is that the challenge to the constitutionality of the act should not be sustained, and there remains only to consider whether the determination of the commissioners has been unreasonable and unjust.

In determining this question we are fully instructed as to the rule which is to govern us. That the presumption is in favor of the order appealed from is held in *Chicago Ry. Co.* v. *Tompkins*, 176 U. S. 173; *Milwaukee E. & L. Co.* v. *City of Milwaukee*, 87 Fed. Rep. 577; in *San Diego Land and Town Co.* v. *National City*, 174 U. S. 739, it is said that "judicial interference should never occur, unless the case presents clearly and beyond all doubt such a flagrant attack upon the rights of property under the guise of regulations as to compel the court to say that the rates prescribed will necessarily have the effect to deny just compensation for private property taken for public use." In *Reagan* v. *Farmers' Loan and Trust Co.*, 154 U. S. 563, it is said: "It is unnecessary to decide, and we do not wish to be understood as laying down an absolute rule, that in every case a failure to produce some profit to those who have invested their money in the building of a road is conclusive that the tariff is unjust and unreasonable." In *Covington Turnpike Co.* v. *Sanford*, 164 U. S. 578, it is said: "The public cannot properly be subjected to unreasonable rates in order that the stockholders may earn dividends." In *San Diego Loan and Trust Co.* v. *Jasper*, 189 U. S. 439, it is said: "It no longer is open to dispute that under the Constitution what the company is entitled to demand in order that it may have just compensation, is a fair return upon the reasonable value of the property at the time it is being used for the public." In *Smyth* v. *Ames*, 169 U. S. 543, the opinion reads: "We hold, however, that the basis of all calculation as to reasonableness of rates to be charged by a corporation maintaining a highway under legislative sanction, must be the fair value of the property being used by it for the convenience of the public, and in order to ascertain that value the original cost of construction, the amount expended in permanent improvements, the amount and

market value of its bonds and stocks, the present as compared with the original cost of construction, the probable earning capacity of the property under particular rates prescribed by the statute, and the sum required to meet operating expenses, are all matters for consideration, and are to be given such weight as may be just and right in each case. We do not say that there may not be other matters to be regarded in estimating the value of the property. What the company is entitled to ask is the fair return upon the value of that which it employs for the public convenience. On the other hand, what the public is entitled to demand is, that no more be exacted from it for the use of a public highway than the services rendered by it are reasonably worth." In *Cotting* v. *Kansas City Stockyards Co.*, 183 U. S. 79, in discussing the decisions of the Supreme Court in regard to the reasonableness of rates, it is said: "It is declared that the present value of the property is the basis by which the test of reasonableness is to be determined, although the actual cost is to be considered, and that the value of the services rendered to each individual is also to be considered." In *Brymer* v. *Butler Water Co.*, 179 Pa. 231, the court held: "A system of water rates that yields no more income than is fairly required to maintain the plant, pay fixed charges and operating expenses and provide a suitable sinking fund for the payment of debts and pay a fair profit to the owners of the property is not unreasonable so that the rates can be reduced by the court. * * *. Ordinarily that is a reasonable charge or system of charges, which yields a fair return upon the investment. Fixed charges and the costs of maintenance and operation must first be provided for, then the interests of the owners of the property are to be considered. They are entitled to a rate of return, if their property will earn it, not less than the legal rate of interest."

It thus appears that the stockholders of a public service corporation are not entitled to require the public to pay dividends upon fictitious stock or for their extravagance or waste. Such a corporation, however, is entitled to a fair return upon the actual value of its property that it is devoting to the public use, after paying all expenses and liabilities reasonably charged against the same. What is deemed a fair return must depend ultimately upon the judgment of the court. In 1886, the committee of the Senate of the State recommended for a gas company in New York a return not exceeding 10 per cent. upon its investment. The New York Mutual Gas and Light Company by its charter is permitted to earn dividends to the extent of 10 per cent. The Senate Committee of 1905, assumed a return of 8 per cent. as proper, and the Gas Commission in 1906 found that 8 per cent. was a reasonable return upon the actual value of complainant's property used in gas manufacture. The Railroad Law of the State, section 38, permits the Legislature to reduce the rate of freight or fare, but the same shall not without the consent of the corporation be so reduced as to produce less than 10 per cent. per annum on the capital actually expended. An inventor may loan his money upon sure security, and is allowed by law to charge 6 per cent. for the loan. The investment in a gas and electric light company, however, is not secured as is a loan upon abundant security. There is in it a greater risk of loss, and upon all economic principles the investment should for that reason be entitled to a greater rate of return than an investment loan upon approved security. If the court should allow to these investors only the same or a less return than is obtained for a loan upon approved security, no capital

would henceforth be advanced for these enterprises, and the public would either be deprived of their advantages or the municipality would be compelled to build for itself. Both upon principle and necessity then, a fair return upon the value of the property actually used, is such a return as shall be fair compensation for the risk assumed by the investor in permitting his money to remain in such an enterprise. The public cannot fairly question this application of the rule, and must pay such rates as will ordinarily yield such return to the stockholders of the public service corporation. The court is charged not only with the duty of protecting the public interest, but also with a duty no less solemn of protecting the property rights of those whose moneys are invested in public service corporations.

Applying these rules to the case at bar, this appellant has not made clear to us that the rate fixed will not yield to its stockholders a fair return upon the value of its property. Evidence has been adduced of the value of its property, of the amount of output of gas and electric current, of the cost of its production, of the receipts in gross from each source. One more factor is needed, however, for the problem — the loss of income which the reduced maximum rate will cause. This factor is not found in appellant's brief, and after a careful review of the evidence, I have been unable to find any figures from which this factor can be fully deduced. If the rate of gas were uniform, at two dollars or one seventy-five per thousand cubic feet, and the price be reduced to one forty-five per thousand, we could at once ascertain to what extent the new rate would reduce the income. But the rate is not uniform. The superintendent swears that the rate charged was all the way from two dollars to ninety-five cents. The reduction made by the Commission would simply cause loss upon the output of gas which has heretofore been sold for a price exceeding one forty-five per thousand.

In the report of the appellant to the Gas Commission for the year ending June 30, 1906, we find that only a little more than 18,000,000 cubic feet of gas was being sold for two dollars, or a net price of one seventy-five, so that the diminution of income caused by the reduced rate of gas would be less than six thousand dollars. As to the reduced income in the sale of electric current caused by the rates fixed, we are left wholly in the dark. The maximum charge has been twelve cents per kilowatt hour. If the price were uniform, a reduction of the price to eight cents would mean a definite loss of income, which would be easily ascertainable. The average price received for the sale of electric current, as sworn to by appellant's expert, was five and forty-two one hundredths cents per kilowatt hour — two and fifty-eight hundredths cents below the maximum fixed by the Commission. The record contains no evidence from which can be ascertained how much of that output has been selling for a price to exceed eight cents, or how much, therefore, will be the loss of income in conforming to the Commission's rates. The only loss then established which would be caused by adopting the Commission's rates, and of which this court can take cognizance, is this loss of less than six thousand dollars. The Commission might properly estimate that this loss would be substantially reduced by new customers which the reduced rate would naturally bring. But aside from this consideration, we are satisfied that with prudent management the company may still return to the stockholders a reasonable percentage upon the value of this property, even under the reduced income. It will hardly be profitable in this opinion to discuss

each item of valuation of the appellant's properties and of cost of production. The valuation of appellant's expert is based upon the cost of reproduction, with no allowance for depreciation, except in one or two minor items, and yet he charges to the expense account a large contingent liability, not only for current repairs but for final replacement. Again, it appears that gas is being sold to some parties for less than the cost of the manufacture. To one customer electric current is furnished for a cent and a half a kilowatt hour, and a substantial amount of electric current is sold for less than cost. It is not apparent why some customers should be charged an exorbitant rate to compensate for loss suffered in the sale to others. After an examination of the record presented, aided by exhaustive and able briefs of counsel, we are not convinced that the rates established by the order appealed from are either unjust or unreasonable to this appellant. The order should, therefore, be affirmed.

Order affirmed with costs. Opinion by SMITH, P. J. All concur, except KELLOGG, J., dissenting in opinion, in which SEWELL, J., concurs.

KELLOGG, J. (dissenting). The Legislature has the power to prescribe a reasonable rate at which an individual or corporation engaged in a public service business shall serve the public. (*Lake Shore, etc., Railway Co.* v. *Smith*, 173 U. S. 684; *People* v. *Budd*, 117 N. Y. 1; *Budd* v. *New York*, 143 U. S. 517.)

"If unhampered by contract there is no doubt of the power of the State to provide by legislation for maximum rates of charges for railroad companies, subject to the condition that they must be such as will admit of the carrier earning a compensation that under all the circumstances shall be just to it and to the public, and whether they are or not is a judicial question. If the rates are fixed at an insufficient amount within the meaning of that term as given by the courts, the law would be invalid, as amounting to the taking of the property of the company without due process of law." (*Lake Shore, etc., Railway Co.* v. *Smith, supra*, 687.)

We must know the source of such power in order to understand its extent and limitations, and in order to determine whether the legislation in question is within or beyond the legislative right. This power does not come from the character of the person performing the service, but from the nature of the service performed. A corporation is a person within the constitutional provision guaranteeing the property rights and equal protection of the law to all persons. (Id., 690.)

The Legislature, therefore, can not prescribe a rate for corporations which is not prescribed for individuals in the same class of business. The statute in question applies in terms to corporations and individuals alike.

"The power of regulation in these cases does not turn upon the fact that the entities affected by the legislation are corporations deriving their existence from the State, but upon the fact that the corporations are common carriers, and therefore subject to legislative control. The State in constituting a corporation may prescribe or limit its powers and reserve such control as it sees fit, and the body accepting the charter takes it subject to such limitations and reservations, and is bound by them. The considerations upon which a corporation holds its franchises are the duties and obligations imposed by the act of incorporation. But when a corporation is created it has the same

rights and the same duties, within the scope marked out for its action, that a natural person has. Its property is secured to it by the same constitutional guaranties, and in the management of its property and business is subject to regulation by the Legislature to the same extent only as natural persons, except as the power may be extended by its charter. The mere fact of a corporate character does not extend the power of legislative regulation. For illustration, it could not justly be contended that the act of 1888 would be a valid exercise of legislative power as to corporations organized for the purpose of elevating grain, although invalid as to private persons conducting the same business." (*People* v. *Budd, supra*, 21.)

"The attempts made to place the right of public regulation in these cases upon the ground of special privilege conferred by the public on those affected can not, we think, be supported. The underlying principle is that business of certain kinds holds such a peculiar relation to the public interests that there is superinduced upon it the right of public regulation." (Id., 27.)

"The power to enact legislation of this character can not be founded upon the mere fact that the thing affected is a corporation, even though the Legislature has power to alter, amend or repeal the charter thereof. The power to alter or amend does not extend to the taking of the property of the corporation either by confiscation or indirectly by other means. The authority to legislate in regard to rates comes from the power to prevent extortion or unreasonable charges or exactions by common carriers or others exercising a calling and using their property in a manner in which the public have an interest." (*Lake Shore, etc., Railway Co.* v. *Smith, supra*, 698.)

All the authorities referring to the subject rest this power of regulation solely upon the police power of the State, which is the right to legislate concerning the public welfare, the public safety and the public health. The constitutionality of this act depends upon the question whether it is a valid exercise of the police power.

"To justify the State in interposing its authority in behalf of the public, it should appear, first, that the interest of the public generally as distinguished from those of a particular class, require such interference; and second, that the means are reasonably necessary for interference with the parties and not unduly oppressive upon individuals. The Legislature may not, under the guise of protecting public interests, arbitrarily interfere with private business, or impose unusual and unnecessary restrictions upon lawful occupations." (*Colon* v. *Lisk*, 153 N. Y. 188; *Lawton* v. *Steele*, 152 U. S. 133, 137.)

"The legislative determination as to what is proper exercise of the police power, is subject to the supervision of the court, and in determining the validity of an act it is its duty to consider not only what has been done under the law in a particular instance, but what may be done under and by virtue of its authority. Liberty, in its broad sense, means the right not only of freedom from servitude, imprisonment or restraint, but the right of one to use his faculties in all lawful ways; to live and work where he will, to earn his livelihood in any lawful calling and to pursue any lawful trade or avocation." (*Fisher Co.* v. *Woods*, 187 N. Y. 90, at pages 94, 95.)

"It can not be reiterated too often that the police power must be exercised within its proper sphere, and by appropriate methods. Whenever a statute arbitrarily strikes down private rights, invades personal freedom or confis-

cates or destroys private property, it is repugnant to the Constitution and should not be permitted to stand, no matter how laudable its purpose or beneficial its effect." (*Wright* v. *Hart*, 182 N. Y. 330, at page 344.)

"In every case that comes before this court, therefore, where legislation of this character is concerned and where the protection of the Federal Constitution is sought, the question necessarily arises, 'Is this a fair, reasonable and appropriate exercise of the police power of the State, or is it an unreasonable, unnecessary and arbitrary interference with the rights of the individual to his personal liberty, or to enter into those contracts in relation to labor which might seem to him appropriate or necessary for the support of himself and family?' Of course, the liberty of contract relating to labor, includes both parties to it. One has as much right to purchase as the other to sell." (*Lochner* v. *New York*, 198 U. S. 45, 46.)

"The provisions of the State and Federal Constitution protect every citizen in the right to pursue any lawful employment in a lawful manner. He enjoys the utmost freedom to follow his chosen pursuit and any arbitrary distinction against or deprivation of that freedom by the Legislature, is an invasion of the constitutional guaranty." (*People* v. *Williams*, 189 N. Y. 131, 134.)

"In a broad sense, whatever prevents a man from following a useful calling is an invasion of his liberty, and whatever prevents him from freely using his lands or chattels is a deprivation of his property." (*People* v. *Havnor*, 149 N. Y. 195, 199.)

The Legislature can not declare it a misdemeanor for a real estate agent to sell land in first and second class cities without written authority (Fisher Co. case, above), nor declare fraudulent, as to creditors, a sale of merchandise in bulk unless certain conditions are complied with (Wright case, *supra*), nor prohibit an employer from requiring that his employees shall not join a labor union (*People* v. *Marcus*, 185 N. Y. 257), nor prescribe the hours which a baker shall be employed (Lochner case, *supra*), nor provide that a woman shall not work in a factory between 8 P. M. and 6 A. M. (Williams case, *supra*), nor require railroad companies to issue mileage books. (*Lake Shore, etc., Railway Co.* v. *Smith*, *supra*.)

The above authorities, and the cases referred to by them show that the Legislature has no power to determine at what price a merchant shall sell his dry goods or groceries, upon what terms a farmer shall sell his horse or farm produce, nor how long a laborer shall work or what he shall receive for his work.

Gas and electricity are the commodities which the defendant sells, the products of its labor and its property, and the constitutional rights above referred to surround it and protect its property and business in the same way that the property and business of an individual are protected. It is just as much for the public welfare, the public safety and the public health, to have cheap bread, milk, groceries and clothing, as cheap gas, electricity and railroad fares. By what right then may the Legislature regulate the price of the latter, and be powerless to interfere with that of the former? The answer to this question is so easy and is so well understood that it is usually overlooked, and lawyers and judges have sought for more remote and complicated reasons, which are alike unconvincing and irrelevant. The reasons usually assigned are the power to regulate corporations, supposed grants and benefits

received from the public, the right to regulate monopolies, and a dedication of the property to the public., *i. e.*, an unnatural partnership by which one partner is to furnish the capital and the labor and the other partners direct him how to carry on his business and take his product at a price fixed by them. If these reasons, or any of them, are valid, it would naturally follow, as many of the earlier cases suggested, without deciding, that the only remedy against oppressive regulation is an appeal to the Legislature or an abandonment of the business.

If the party engaging in such service has agreed in advance that the Legislature may regulate the manner in which his business shall be conducted, and fix the price of his product, he is not in a position to complain of unreasonable legislation in those respects. In *Purdy* v. *Erie Railroad Co.*, 162 N. Y. 43, it was held that the mileage book law which had been declared unconstitutional as to existing railroads, was valid as to companies beginning their business after the passage of the law, Chief Judge Cullen saying, at page 49: "Therefore, a regulation as to the price of transportation, which would be an illegal exaction when sought to be imposed on existing corporations solely by legislative fiat, may, in the case of future corporations, be the mere performance of the obligation of a contract."

Justice Brewer, in *Cotting* v. *Kansas City Stock Yards*, 183 U. S. 79, 91, says: "There has been no further ruling than that the State may prescribe and enforce reasonable charges."

"From the earliest period of the common law it has been held that common carriers were bound to carry for a reasonable compensation. They were not at liberty to charge whatever sum they pleased, and even where the price of carriage was fixed by the contract or convention of the parties, the contract was not enforceable beyond the point of reasonable compensation. From time to time statutes have been enacted in England and in this country, fixing the sum which should be charged by carriers for the transportation of passengers and property, and the validity of such legislation has not been questioned. But the business of common carriers, until recent times, was conducted almost exclusively by individuals for private emolument, and was open to every one who chose to engage in it. The State conferred no franchise and extended to common carriers no benefit or protection, except that general protection which the law affords to all persons and property within its jurisdiction." (*People* v. *Budd*, 117 N. Y. 19.)

And at page 20: "The principle of the common law that common carriers must serve the public for a reasonable compensation became a part of the law of this State, and from the adoption of the Constitution has been a part of our municipal law."

Before the day of railroads, private individuals operated stage coaches and performed the duties of common carriers. The common law determined that the calling was affected with a public interest, and charged upon it the duty of furnishing to all the public alike a reasonable service at a reasonable price. Of course the operators used the public roads; so did every one, and in every business. If the stage driver owned the right of way upon which he traveled, he was still a common carrier and was charged with the duties pertaining to that calling.

The following situation illustrates that the duty arises from the nature of the calling and not otherwise. A man owns a large tract of land, with a

manufacturing plant in the center. A railroad runs across each end of it, he having conceded the right of way. Upon a private right of way he runs stage coaches and a trolley line for hire, between the railroad stations. He also builds a road connecting those points, and along the road he builds houses and rents them to his employees and others, and a village thus grows up, he owning all the land and all the houses. His plant is furnished with an electric light system, from which he sells electricity to the villagers, but the wires extend along the private right of way and do not approach or cross the road. He operates the meat market, the milk route, supplies ice, and a general store. The reasons usually assigned, above stated, as the basis for a legislative regulation of prices are all found wanting here. But in running stages and trolley cars for a fare, and selling electricity, he enters upon a calling which the common law has regulated, and he can not control the price. In the other matters the price is subject to the agreement of the parties, and he may refuse to sell except at his own price.

Supplying the public with gas and electricity for a price (*People ex rel. Woodhaven Gas Co.* v. *Deehan*, 153 N. Y. 528, 533), and operating public elevators for profit, and certain other callings, have been determined to be so affected with a public interest that they are charged with the common law rule applicable to common carriers, that the service must be reasonable to all alike and at a reasonable price, and those engaging in such calling are charged with that duty and are deemed in advance to agree to such conditions.

The fact that the person rendering the service has the right to make reasonable regulations with reference to his business, resulted in the public permitting him to fix the rate. This often led to exorbitant charges and extortion and called with a loud voice for a remedy. While the person performing the service had the legal right to receive a reasonable rate, he had not the right arbitrarily to fix that rate. Having agreed to render the service at a *quantum meruit*, it is repugnant to the law governing such transactions that one party may arbitrarily and conclusively fix the price. It is therefore reasonable for the Legislature, in the exercise of its police power, to reverse the situation and name a reasonable price. But it is as clearly illogical and unfair that the public shall fix a final and conclusive price, as it would be to permit the person furnishing the service so to do. A reasonable price fixed by either party invades no right; an unreasonable price fixed by either party is illegal at common law. Before any statute was passed regulating the rate to be charged every patron of such a service, and the party furnishing it, had the common law right at any time to bring the other into a court of justice and have the reasonableness of the rate adjudicated. The common law imposes the duty of a reasonable rate; no other could be exacted. But the law did not execute itself, and it is necessary and proper for the Legislature to require an observance of the common law contract price. In other words, no new regulation infringing upon property rights is necessary or proper, but a regulation is necessary and proper to administer and carry into effect the common law rate. Strictly speaking, it is a mistake to say that the Legislature, or a commission created by it, may in any case fix the rate. The common law fixes the rate; the Legislature or the act of the commission is simply an enforcement of the common law rate. "In fact the common law rule which requires the charge to be

reasonable, is itself a regulation as to price. Without it the owner could make his rate at will and compel the public to yield to his terms or forego the use." (*Munn* v. *Illinois*, 94 U. S. 113, 134.)

"To limit the rate of charges for services rendered in a public employment or a use of property in which the public has an interest was only changing regulation which existed before and established no new principle in the law but only giving new effect to an old one." (*Budd* v. *New York*, 143 U. S. 517, 538.)

In speaking of the common law duty to furnish service at a reasonable price, Justice Brewer, in *Cotting* v. *Kansas City Stock Yards, etc., supra*, at page 97, says: "The authority of the Legislature to interfere by a regulation of rates is not an authority which destroyed the principles of these decisions but simply to enforce them, though its prescription of rates is prima facie evidence of their reasonableness." Prima facie the maximum rate as fixed by the Legislature is reasonable. (*Lake Shore, etc., Railway Co.* v. *Smith*, above, 665, 666.)

It is manifest that while the reasoning of the cases as to the basis of the rule are not at all times harmonious or satisfactory, the result of all is that the price must be reasonable, that is, the common law price. Therefore it follows that this common law duty and right is the real source of the power to regulate rates. At the time the statute in question was passed the defendant was engaged in a business the nature of which charged it with the duty, and gave it the property right, of furnishing gas and electricity, at a reasonable price, and gave it the right to have the reasonableness of the price determined by the adjudication of the courts in case it was controverted. Any legislation which imposes an unreasonable price upon it, or deprives it of its right to have the reasonableness of the price determined by a court of justice, deprives it of its property without due process of law, and denies it the equal protection of the law. The law is forcibly and concisely stated in 8 Cyc., page 1067: "The Legislature, itself or through a railroad commissioner, etc., prescribes the rates. The courts decide whether it is so unjust and unreasonable as to conflict with the constitutional guaranties. The Legislature cannot say finally that a rate is just and reasonable, nor can the court revise or change the rates or say what would be a reasonable and just rate."

We must not be misled by the use of the term "maximum rates" in this class of legislation. There can be but one reasonable price for the same article at the same time in the same place. A reasonable price cannot be so unreasonable that another and different reasonable price can take its place at the caprice of one of the contracting parties. As the contract between the producer and the public is that he shall have a reasonable price for such service as is required of him and the Legislature has fixed the price, it is presumed that the price so fixed is a reasonable price, which does not admit of another so-called reasonable price. (*Brooklyn Union G. Co.* v. *City of New York*, 188 N. Y. 334.) A proper construction of the words "maximum rate" is that it is the reasonable rate, with the permission to the party furnishing the service to do business at an inadequate profit or at a loss if he desires. A person has the legal right to furnish such service at less than its reasonable value, or even to give it away, so long as reasonable service is furnished and all are treated alike, he is within his constitutional rights

unless his creditors or the lunacy authorities interfere. An attempt to fix a maximum price so large that under the most unfavorable conditions it will produce a reasonable price to the producer, would clearly be an unreasonable price under the most favorable conditions, or under ordinary conditions.

It is not conceivable that in a great State like this the Legislature can prescribe a uniform price for supplying gas and electricity in every locality. The various climatic conditions, the distances of the various plants from the supply of coal and oil and from the factories producing its appliances and machinery, and the amount of service required, the price of labor and the various other conditions which readily occur to the mind, show clearly that a reasonable price in some large cities might be a very unreasonable price in some small villages. It would seem that a statute declaring a uniform rate throughout the State, applicable to every locality and every plant, would upon its face be unreasonable. These conditions render it not only reasonable but almost a necessity, if any regulation as to price is to be made by the public, that each locality shall be treated by itself, and an administrative commission which may visit the various localities, take evidence, make investigations in various ways and ascertain the exact situation in each locality, is a most just and effective means of determining in the first instance what price shall be charged in a particular place.

The legality of such commission has been sustained by the courts of many of the States, and by the Supreme Court of the United States. Changing conditions from time to time determine what is a reasonable rate, and an order of an administrative commission can better enforce such rate than an act of the Legislature. Such legislation is a reasonable exercise of the police power. Legislation gives the power to the commission, but its duties are administrative only, viz., to compel an observance of the existing laws. It is the proper function of the Legislature, and of the Legislature alone, to impose upon property and persons duties not already existing. If the common law rule that parties engaged in this service must serve all alike, give a reasonable service at a reasonable price, does not apply to parties engaged in a service of this kind, and is not the foundation of this class of legislation, then the regulation of rates as to such service is a legislative act, and the duty imposed springs from legislation alone, and it is difficult to understand how the Legislature may delegate its functions and allow some other body to impose a new duty upon persons and property. If the power to regulate arises only from an understanding that the person will carry on his business subject to legislative control, this means that he is willing to take the judgment and discretion of the Legislature on each particular subject in which he is sought to be controlled. The legislative judgment and discretion which he contracted for does not allow the Legislature to impose upon him the judgment and discretion of an unknown commission. The act of the commission in fixing the rates is legislative, if in the absence of such act no legal limit as to rate existed. It is administrative if there was a legal regulation of the rates, and the commission is simply to name and enforce the common law rate. The common law duties, as stated, furnish a broad and secure foundation upon which may rest all legislation necessary and proper to protect the public interests. In the absence of such duties, the right in each case is problematical, and the act of such commission of doubtful validity.

Like every administrative board or executive officer, the commission must know the facts upon which it is to act, and it may grant hearings, take testimony and do various acts which naturally pertain to a court of justice, but it is not thereby made a court of justice. Its acts are still administrative and not judicial. (*People ex rel. Lodes* v. *Dept. of Health*, 189 N. Y. 185, 190.) The Legislature may, through the various committees, grant hearings, determine facts and make regulations based upon its conclusion therefrom. It does not thereby become a court, nor its acts judicial. The hearing is one step in acquiring the necessary information upon which the commission may in part base its administrative order. In *Chicago, etc., Railway Co.* v. *Minnesota*, 134 U. S. 418, the Minnesota statute sought to make the order of such a commission a final decision of the rights of the parties, but the court held it an unreasonable exercise of the police power, saying, at page 457: "It deprives the company of its right to judicial investigation, by due process of law, under the forms and with the machinery provided by the wisdom of successive ages for the investigation judicially of the truth of a matter in controversy, and substitutes therefor, as an absolute finality, the action of a railroad commission which, in view of the powers conceded to it by the State court, can not be regarded as clothed with judicial functions or possessing the machinery of a court of justice." A reading of the statute considered in that case shows that notice was contemplated and served, and the company appeared and was heard.

In *Reagan* v. *Farmers' Loan and Trust Co.*, 154 U. S. 362, a Texas statute provided for a hearing after notice, that the order of the commission should be conclusive, and be deemed and accepted to be reasonable and fair, and should not be converted until finally found otherwise in an action brought against the commission in a court of competent jurisdiction in Travis county, Texas. The statute then regulated the action by which such decision should be reviewed. It was held that an action could be maintained in the United States court for an adjudication that the rate so fixed by the commission was unreasonable, the court saying, at page 397: "It is doubtless true, as a general proposition, that the formation of a tariff of charges for the transportation by a common carrier of persons or property is a legislative or administrative rather than a judicial function. Yet it has always been recognized that, if a carrier attempted to charge a shipper an unreasonable sum, the courts had jurisdiction to inquire into that matter and to award to the shipper any amount exacted from him in excess of a reasonable rate; and also in a reverse case to render judgment in favor of the carrier for the amount found to be a reasonable charge. The province of the courts is not changed, nor the limit of judicial inquiry altered, because the Legislature instead of the carrier prescribes the rates. The courts are not authorized to revise or change the body of rates imposed by a Legislature or a commission; they do not determine whether one rate is preferable to another or what under all circumstances would be fair and reasonable as between the carriers and the shippers; they do not engage in any mere administrative work; but still there can be no doubt of their power and duty to inquire whether a body of rates prescribed by a Legislature or a commission is unjust and unreasonable, and such as to work a practical destruction to rights of property, and if found so to be, to restrain its operation."

And again at page 398: "The question of the reasonableness of a rate

of charge for transportation by a railroad company, involving as it does the element of reasonableness, both as regards the company and as regards the public, is eminently a question for judicial investigation, requiring the process of law for its determination."

And at page 399: "These cases all support the proposition that while it is not the province of the courts to enter upon the merely administrative duty of framing a tariff of rates for carriage, it is within the scope of judicial power and a part of judicial duty to restrain anything which, in the form of a regulation of rates, operates to deny to the owners of property invested in the business of transportation that equal protection which is the constitutional right of all owners of other property. There is nothing new or strange in this. It has always been a part of the judicial function to determine whether the act of one party (whether that party be a single individual, an organized body, or the public as a whole) operates to divest the other party of any rights of person or property. In every constitution is the guaranty against the taking of private property for public purposes without just compensation. The equal protection of the laws which, by the fourteenth amendment, no State can deny to the individual, forbids legislation, in whatever form it may be enacted, by which the property of one individual is, without compensation, wrested from him for the benefit of another, or of the public. This, as has been often observed, is a government of law, and not a government of men, and it must never be forgotten that under such a government, with its constitutional limitations and guaranties, the forms of law and the machinery of government, with all their reach and power, must in their actual workings stop on the hither side of the unnecessary and uncompensated taking or destruction of any private property, legally acquired and legally held."

Again: "The Legislature has the power to fix rates, and the extent of judicial interference is protection against unreasonable rates." (*Chicago, etc., Railway Co.* v. *Wellman*, 143 U. S. 339, at 344; *Reagan* v. *Farmers' Loan & Trust Co.*, 154 U. S. 362, at 398; *Smyth* v. *Ames*, 169 U. S. 466, at 523; *Lake Shore, etc., Railway Co.* v. *Smith*, 173 U. S. 684.)

This judicial review means due process of law. "Due process of law 'means law in its regular course of administration through the courts of law' (Miller on the Constitution, vol. 2, p. 664); or 'a regular trial according to the course and usage of the common law' (Lincoln's Const. Hist., vol. 4, p. 37)." (*People* v. *Johnson*, 185 N. Y. 219–228.)

"To say, as has been suggested, that 'the law of the land' or 'due process of law,' may mean the very act of legislation which deprives the citizen of his rights, privileges or property, leads to a simple absurdity. The Constitution would then mean, that no person shall be deprived of his property or rights, unless the Legislature shall pass a law to effectuate the wrong, and this would be throwing the restraint entirely away. The true interpretation of these constitutional phrases is, that where rights are acquired by the citizen under the existing law, there is no power in any branch of the government to take them away; but where they are held contrary to the existing law, or are forfeited by its violation, then they may be taken from him — not by an act of the Legislature, but in the due administration of the law itself, before the judicial tribunals of the State. The cause or occasion for depriving the citizen of his supposed rights must be found in the

law as it is, or, at least it cannot be *created* by a legislative act which aims at their destruction. Where rights of property are admitted to exist, the Legislature cannot say they shall exist no longer; nor will it make any difference, although a process and a tribunal are appointed to execute the sentence." (*Wynehamer* v. *The People*, 13 N. Y. 378, at 392, 393.)

"It is plain, therefore, both upon principle and authority, that these constitutional safeguards, in all cases, require a judicial investigation, not to be governed by a law specially enacted to take away and destroy existing rights, but confined to the question whether, under the pre-existing rule of conduct, the right in controversy has been lawfully acquired and is lawfully possessed." (Id., 395.)

In *Brooklyn U. G. Co.* v. *City of New York, supra*, it was held, the plaintiff having furnished and the plaintiff having received gas pursuant to a statute fixing the price, that the defendant could not question the reasonableness of the price for the gas so received. If we reverse the situation, it may follow that if defendant furnishes gas pursuant to a statute fixing the price, it cannot thereafter make a claim against the purchaser for the gas so furnished at other than the price so fixed. In such cases the parties by furnishing and receiving gas may be held to have assented to the price. It may be that a rate so fixed must be challenged in a direct action or proceeding to have the rate declared void, and that the parties cannot contest the statutory price for gas which has been furnished and used, presumably, under the terms of the statute. It is not material to here consider what the particular remedy is. That there is a legal remedy in the courts is beyond question.

It follows from this reasoning that before the enactment of the statute in question, the defendant was by common law charged with the legal duty and clothed with the legal right of receiving a reasonable compensation for its service, and the courts of justice were always open to it to protect such rights. To prevent extortion, and to force upon the defendant the performance of its legal duty, the observance of its contract with the public, the Legislature may name a reasonable rate, or may create an administrative committee charged with that duty. When fixed, such rate is binding until it is adjudged to be unreasonable by a court of competent jurisdiction. Where A seeks in the courts to require B to observe his legal duty and carry out his contract to A, the question of confiscation and destruction of property are not discussed; the only question is what are the contract obligations of the parties, and when those obligations are determined, the judgment of the court follows. That is the situation here. The defendant is the owner of its plant, and may carry on its business in its own way, subject, however, to the duties and contract obligations it owes to the public. The nature of its calling charges upon it, and its property, only the obligation of furnishing gas and electricity to all alike, in a reasonable manner and at a reasonable price. That is the only contract between the parties. If the public seeks to enforce upon it obligations and conditions beyond that duty, and beyond the terms of the contract, it is a proper question for the courts to decide just what the contract is, and to require its performance according to the letter and the spirit thereof. No legislation can destroy or change the effect of the contract between the parties, or deprive either of them of the right to have the court adjudge the obligations and duties arising under such contract.

The legislation in question, passed while the defendant was engaged in its present business, is not a reasonable exercise of the police power, and imposes upon defendant obligations beyond and outside of its legal duty, and is therefore unconstitutional. The provision of the statute that the commission fix a rate "within the limits prescribed by law," requires it to fix a reasonable rate and recognizes that the common law prescribes a rate. The provision that the commission shall give notice and hold a public hearing, and after such hearing "and upon such investigation as may have been made by the commission, or its officers, agents or inspectors" may fix the maximum price, etc., would be a proper procedure for a purely administrative commission, but not for a court. The statute provides "The price so fixed by the commission shall be the maximum price to be charged by such person or corporation for gas or electricity in such municipality for a term of three years and until, after the expiration of such term, such commission shall upon complaint, as provided in this section, again fix the price of such gas or electricity." The complaint referred to is a complaint made by the consumers, or by the local authorities only. It is further provided that the orders of the commission may be enforced by mandamus, and that upon proof that the order has been made and has not been complied with after notice thereof, the court may issue a mandamus to enforce it. The word "may" in a public statute giving a remedy of this kind means "must."

It is evident that these provisions of the statute attempt to fasten upon the defendant the order of this administrative commission as a final and conclusive determination of its rights. The only defense admissible in the mandamus proceeding is either that the order was not made or that it has been complied with. The order may be based not only upon the evidence and proceedings had before the commission at the public hearing, but upon an *ex parte* statement of the officers, agents and inspectors of the commission, or one of the commissioners, as to what they discovered upon a private investigation of the plant, books and method of such corporation, and which investigations the statute contemplates shall be made before the notice and public hearing. The defendant has no means of knowing what such *ex parte* reports are, and consequently it has no opportunity of controverting the conclusions reached by such officers or agents, or examining them with relation thereto. Until the judge presiding at a trial may adjourn court and take the *ex parte* statements of the sheriff, the stenographer, the deputy sheriffs in attendance, and the other officers and employees of the court, this investigation cannot be considered as due process of law.

It is against the common law rights of the defendant, which is entitled to receive a reasonable price for its product, as conditions change from time to time, that the Legislature may dictate a price binding upon it for three years, and perpetually unless the local authorities or the customers desire a change. Heretofore, when the producer fixed the price, we may assume that the margin of profit was so large that it was not seriously affected by the change in the cost of the different items going to make up its product. But now a change has taken place, and it is assumed that the price of gas and electricity will be regulated so as to give only a fair profit from the business. The difference between a profit and a loss to the producer may be made up entirely by the changes in the price of wages, material, coal, oil, copper and other things entering into the expense account. The experience of the last

three years has demonstrated that what was a reasonable price three years ago is an unreasonable price now. The commission is not required to fix a present reasonable price for gas and electricity, but a price which will be reasonable for a period of three years, allowing them to forecast the future and to determine at their will whether times will be good or bad during that time. A conscientious commission, under this statute, is not performing its duty by considering the mere cost at the present time, for the rate to be fixed extends into the future, and we do not know whether it is decreed by this order that prices of everything shall go still higher or that they shall recede the basis of three years ago. The provision that the consumers, or the municipality, after three years, may make complaint and have the price again adjusted, but giving the producer no right to a rehearing, denies to the defendant the equal protection of the law. The plain meaning of the statute is that if anything going to make up the price of gas and electricity falls in the market, the public may have a reduction in the price, but if everything advances, the defendant must perpetually serve at the same price.

An appeal to the Appellate Division is permitted, in which case the commission appears by the Attorney-General as a party to the litigation. The right to appeal from the act of an administrative board does not make the act of that board, or the result of the appeal, due process of law, or make final an order which is only prima facie evidence of reasonableness. We have seen that it is not a part of the duty of the court to prescribe rates, but that its full duty is performed when it decides whether a given rate is reasonable or unreasonable. The Appellate Division has no knowledge as to how far the things seen by one of the commissioners, or their officers, agents or inspectors, have entered into the determination. It is evident that the decision of an Appellate Court upon such a record is not the judicial investigation which is the common law right of the defendant. If this court were to go outside of its functions and undertake the administrative duty of fixing a rate, it is bound by the provision of the statute which, in substance, requires a rate to be fixed which shall be reasonable for three years, and as against the company forever unless the other party to the controversy asks to have it changed. It follows that if the order of the commission is improper for the reasons suggested, no action of the Appellate Division can give it validity, and this court may well refuse to become an administrative commission. The court may properly limit its inquiry to a review of the order of the commission, and give judgment affirming or annulling it.

Reference is made to the Public Service Commissions Law, chapter 429, Laws of 1907, which went into effect shortly after the order in question was made, and it is urged that the defendant is not injured by this order even if the provisions of the statute under which it was made are unconstitutional. The new statute permits the Commission to grant rehearings upon its orders; it is not given the power to grant rehearings upon orders made by the former Commission. There is no provision in the new statute which relieves the defendant from the force of the order appealed from. Its only remedy is the judgment of the court. The validity of the present order must be determined by the terms of the statute under which it was made.

The contention that if the order of the commission is void we have no right to review it is unsound. The statute, so far as it creates a commission, is valid, and that commission has the right to make various orders, many of

which are proper, and an appeal is permitted to this court from any of its orders. The rule in the Purdy case, *supra*, indicates the validity of such an order, if made as to a business established after the statute was passed. The question here presented is whether the order in question is one which the commission was authorized to make.

In my judgment the order is invalid. It should therefore be annulled, with costs.

FREDERICK POTTER and CLARENCE KELSEY, Individually and as Trustees, etc., Plaintiffs, *v.* THE INTERBOROUGH RAPID TRANSIT COMPANY and BOARD OF RAPID TRANSIT COMMISSIONERS OF THE CITY OF NEW YORK, Defendants.

(Supreme Court, New York Special Term, May, 1907.)

Municipal corporations: Powers and exercise of governmental functions — Control of streets, etc.— Power of New York city — Rights of subsurface occupants: Property rights, etc.— Title of New York city to streets.

The fee of Broadway in the city of New York is in the municipality, in trust for the public, whose rights in the street include its use for a subsurface or tunnel railroad.

A property owner on said street may maintain vault spaces under the sidewalk in front of his property only by virtue of a permit or license from the city, revocable whenever the city or public use requires such spaces.

Where plaintiffs were the owners of premises on Broadway and licensees of the vault spaces under the sidewalk of said street extending along almost the entire front of the premises and out as far as the curb line, and the underground railroad known as the "subway" as actually constructed takes over 1,000 square feet of such vault spaces, the threatened removal of a brick wall, constructed by plaintiffs not upon their fee but within the line of said street and constituting a part of the westerly wall of the station and standing between the platform of said station and steps or stairway leading therefrom to plaintiffs' building, may not be restrained by injunction where neither the defendant Rapid Transit Company nor the defendant Board of Rapid Transit Commissioners of the city of New York asserts the right to send passengers through the building of plaintiffs without their consent but both contend that the proper location of said wall is near the top of said steps and along the building line.

ACTION for an injunction.

John Larkin, for plaintiffs.

Strong & Cadwalader, for Interborough Rapid Transit Company.

George L. Rives, for Board of Rapid Transit Railroad Commissioners.

FITZGERALD, J. This is an action by the owners of the premises situated at the southwest corner of Broadway and Rector street in this city, to restrain the threatened destruction and removal by the defendants of a brick wall

constructed by the plaintiffs, constituting part of the westerly wall of the station of the underground railway, known as the subway, at that place, and standing between the platform of said station and steps or stairway leading therefrom to the plaintiffs' building. The present building of the plaintiffs, whose testator acquired title to the premises in 1884, was erected in 1897, in place of an old building which then stood thereon, and which had appurtenant to it vaults under the sidewalk of Broadway extending along almost the entire front of the premises, seventy-eight feet, and out as far as the curb line. Those vaults were constructed prior to 1857 under an authority the nature, extent, terms and conditions of which are unknown, since the city's records do not antedate that year. Larger vaults being required in connection with the new and larger building, application was made to the city for permission to use such larger vault space, which was refused unless payment was made for the entire area thereof. That payment having been made under protest, suit was subsequently successfully brought to recover back that portion thereof which represented the payment held to have been made for the old vaults. The proposed construction of a rapid transit tunnel railway in lower Broadway being a matter of public knowledge and discussion, one of the plaintiffs (Frederick Potter), after an informal discussion with an engineer of the defendant board, arranged the plans of the new building to provide for an entrance thereto from a station of said railway, constructed the basement of the building on a level with that of the platform of the expected station, and built the basement wall with an arch to allow for said entrance. At that time the Constitution of this State forbade the enactment of any law authorizing the construction or operation of a street railroad without the consent of the owners of one-half in value of the property bounded thereon, or, if unobtainable, in lieu thereof, the determination when judicially confirmed of three commissioners appointed by the Appellate Division of this court after hearing of interested parties, and also the consent of the local authorities having control of the portion of the city's street or highway affected. That provision of the fundamental law applied to subway railways. (*Matter of District R. R. Co.*, 107 N. Y. 42.) The Rapid Transit Act then provided that, after the said board should determine the existence of a public need for the establishment of a rapid transit railway, it should then determine and establish the route or routes thereof, and the general plan of construction, the latter of which should "show the general mode of operation and contain such detail as to manner of construction as may be necessary to show the extent to which any street, avenue or other public place is encroached upon and the property abutting thereon affected." After the adoption of the plans and conclusions of said board by the common council, and the approval thereof by the mayor, the route so determined might be located, provided the consents of the said property owners along the line thereof were obtained, or, in lieu thereof, the order of the Appellate Division of this court confirming the determination of commissioners appointed by it, made after due hearing of interested parties. The act further provided (section 6) that after such consents, determination or order were given or made, the board should at once prepare "detailed plans and specifications for the construction of such rapid transit railway or railways in accordance with the general plan of construction, including all devices and appurtenances deemed by it necessary to secure the greatest efficiency, public convenience and safety, including the number,

location and description of stations, and plans and specifications for the suitable supports, turn-outs, switches, sidings, connections, landing places, buildings, platforms, stairways, elevator, telegraph and signal devices, and other suitable appliances incidental and requisite to what the said board may approve as the best and most efficient system of rapid transit in view of the public needs and requirements." The board might alter such plans and specifications, in accordance, however, with the general plan of construction, and (section 38) "no changes or modifications in the plans and specifications consented to and authorized pursuant to section 5 of this act shall be made without the further consent and authorization provided for in said section." Provisions were made in sections 37 and 39 for the means of payment for the rights, privileges and easements of abutting owners, for the right of the contractor to condemn the same and for the prevention of improper interference therewith. Early in 1901 the said board adopted a route and general plans for a rapid transit railway running down and under Broadway, directly in front of the plaintiffs' building, and under the East river to Brooklyn. As the material parts thereof are hereinafter discussed, it is unnecessary to quote such plans here. At the same time the board formally resolved: "That this board hereby adopts the drawings now produced and numbered 1, 2, 3, 4, 5 and 6 as showing the route and general plan hereby adopted." The route as adopted expressly included a loop or branch the center line of which should begin at a point which should be found most convenient in Broadway between Bowling Green and Exchange place. In one of said drawings, Exhibit 12, showing the general line of the route down Broadway but exhibiting no stations or details, the said loop was shown as diverging from the main line opposite the plaintiffs' premises, which would have prevented the construction of a station at that place. Another of said drawings, Exhibit 20, showed a typical station, consisting of a platform with the central part of the station running back away from the tracks into an intersecting street, sixty feet wide, and crossing the longitudinal street of the route at right angles. The said route and general plans were approved by the common council and the mayor; but because of a failure to obtain sufficient consents from property owners the appointment of the said commissioners was applied for and secured, and their determination that the railroad as laid out ought to be constructed and operated was obtained and confirmed. Accordingly a form of contract and detailed drawings were adopted by the board, one of which, 2 C-1, showed the details of construction of a proposed station at the intersection of the west side of Broadway with Rector street, with a flight of stairs leading directly into the basement floor of the plaintiffs' premises. A contract for the construction of said railroad was subsequently made with the Rapid Transit Subway Construction Company. The plaintiff above referred to, the managing trustee of the building, neither consented to the construction of the road nor opposed it before the Appellate Division; he did not at the times referred to examine either said Exhibit 12 or Exhibit 20; but he was furnished with the detailed plan of the station, 2 C-1. When actual work was about to be begun in front of his premises he wrote the representative of the said board for plans showing the encroachment upon the vaults, because, as he stated, considerable rearrangement of the machinery and tanks in the subcellar would have to be made before the contractors "started in" on his vaults. After receipt of those plans, he was notified, not in absolutely ac-

curate form, that the plan of the railroad required the permanent use of that portion of his vaults under the roadway of Broadway and under the sidewalk outside of the line of the street, that the contractor would occupy the same, and that plaintiff should immediately remove his property therefrom. Thereafter further correspondence ensued and, at plaintiffs' request, a conference was had concerning the removal of their machinery which the work of the contractor would interfere with, with the result that such machinery was removed. The construction was completed, and the station was shortly after put in use. Contrary to the expectation of the parties at their informal discussion above referred to, the level of the station platform as constructed was lower than the basement floor of the plaintiffs' building, necessitating a short flight of steps to the latter; a wall through the arched opening provided by the plaintiffs when constructing the building was removed with the plaintiffs' knowledge, and a wooden partition was erected at the top of the steps to keep the workmen on the station from the building. The contractor assigned the lease part of the contract to the defendant company, between which and the plaintiffs, and, finally, the said board, correspondence and negotiations ensued concerning the removal of the wooden partition, the care and maintenance of the station entrance through the plaintiffs' building and the cost thereof, the responsibility for accidents occurring therein, and the terms and conditions of an agreement concerning the same. These negotiations resulted in nothing, and the plaintiffs finally boarded over the steps, used the space (about six feet wide east and west, and as long as the steps are wide), between the building line and the brick wall referred to, and hence lying not upon the plaintiffs' fee but within the line of Broadway, and erected the brick wall in question, which the engineer of the defendant board has threatened to tear down, and to erect instead another wall near the top of the steps and along the building line. The space occupied by the steps is not needed at present. No right of way in or over the plaintiff's building or the basement corridors thereof has been acquired by condemnation or otherwise. Neither of the defendants asserts the right to send passengers through the building of the plaintiffs without their consent. They state the question at issue to be merely the proper location of the wall to keep people from entering the building. The brick wall is built on part of the vault space formerly occupied by the plaintiffs, within the line of Broadway, and not upon the plaintiffs' fee; it constitutes part of the westerly wall of the station, being built flush with the portions thereof connected by it. If the road had been constructed according to the plan shown by Exhibit 12 there could have been no station at Rector street in front of the plaintiffs' premises, and the plaintiffs' vault spaces would have been untouched; if the station had been constructed according to Exhibit 20, the "typical station" plan, but 441 square feet of the plaintiffs' vaults would have been taken; as actually constructed it takes over 1,000 square feet thereof, and the taking of more thereof is threatened. The plaintiffs contend that their rights to the said vaults constitute property rights attached to their fee, being dominant easements in the street under the surface thereof similar to the dominant easements of an abutting owner over the surface of the streets, of which they cannot be deprived either by the city of its own motion or by legislative command, without adequate compensation; or assuming that for public purposes they may be deprived thereof without compensation only so much of said vault space can be taken as was necessary

according to the route and general plans of the rapid transit board to which it is legally presumed their consent was given in the form of the order of the Appellate Division of this court confirming the report of the commissioners appointed by it. It seems to me, however, that there can be no question that the fee of the street known as Broadway in front of the plaintiffs' premises is in the city of New York, in trust, nevertheless, for the public, for the purposes of general travel and of using the same for laying water, gas and sewer pipes, and for other and additional public and beneficial purposes to which, without illegal injury to individuals, the said street may be or become, with the development of the municipality, applicable. (*People* v. *Kerr*, 27 N. Y. 188, 203.) The public right to that street included its use for "every kind of travel and communication for the movement or transportation of persons or property which is reasonable or proper in the use of a public street," and which may be necessitated, in the judgment of the public authorities, by the inadequacy of the surface for the accommodation of public travel. (*Sears* v. *Crocker*, 189 Mass. 586.) Among such uses is that for a subsurface or tunnel railroad. With respect to the rapid transit railway in this city, our highest court has declared that it was a public necessity, enforced by the crowded and congested condition of the surface of our streets and the requirements of public transportation, which the city was forced to build with its own money, at its own risk, and which it was authorized to build, under the Constitution of the State. (*Sun Printing and Publishing Assn.* v. *Mayor, etc.*, 152 N. Y. 257.) It is true that abutting property owners, like the plaintiffs, have the right to insist upon the street being kept open as such, and have easements of access from the street and of light and air coming therefrom, of which they cannot be arbitrarily deprived, without compensation, by structures useless for or foreign to general street purposes, even though authorized or ordered by the Legislature. This rule was established and applied in the well-known "elevated railroad cases" and "Park avenue viaduct cases," in this city, upon which so much stress is placed by counsel for the plaintiffs (*Story* v. *N. Y. El. R. R. Co.*, 90 N. Y. 122; *Lahr* v. *Met. El. Ry. Co.*, 104 id. 268; *Abendroth* v. *Man. Ry. Co.*, 122 id. 1; *Kane* v. *El. R. R. Co.*, 125 id. 164; *Remine* v. *N. Y. El. R. R. Co.*, 128 id. 157; *Lewis* v. *N. Y. & H. R. R. Co.*, 162 id. 202; *Muhlker* v. *Harlem R. R. Co.*, 197 U. S. 544), because, as a matter of fact, the structures involved therein, an elevated platform and viaduct holding the rails of steam railroads, were subversive of and repugnant to the uses of the streets on which they were erected as open public streets. It is true that in the first cited case it was said that "the public purpose of the street requires of the soil the surface only," and that very ancient usage permits the introduction under it of sewers, water pipes, and upon it posts for lamps. That statement must be regarded in the light of public knowledge and experience at the time it was made, before an underground railway in the principal street of the city of New York was deemed necessary or physically possible; as was said substantially in *People* v. *Kerr*, *supra*, the justice who should attempt to define the limits to or for which the land of a city street might be applied or required by his own knowledge or experience at the time would go far beyond what his predecessor might have dreamed of a century ago, but "would be left far in the background in the progress of civilization and improvement which is to take place in the hundred years to come;" the statement took no account of the urban development which in the

course of time made an underground rapid transit railway in the city of New York in the judgment of the same court (*Sun Printing and Publishing Assn. v. Mayor, etc.*, 152 N. Y. 257) a great and pressing public necessity. Consideration must next be given to the nature of the plaintiffs' rights to the vault spaces in front of their property and to the effect thereon of the public use of the street in which they were situated. I think that at no time, even prior to 1856 and 1897, did they have more than a revocable permit or license from the city to maintain said vaults. While it is true that the city's records do not antedate 1856, by which time the old vaults were in use, and we cannot, therefore, learn the exact nature or extent of the authority under which they were constructed and maintained, yet that conclusion is consistent with the well-known rule that the city can grant no permanent or exclusive right in the streets. But however that may be, the new vaults, erected in 1897, on part of the area of which the brick wall in question now stands, were constructed and maintained, accepted and paid for, under a license or permit from the city, revocable whenever the city or public uses required them; for, indeed, that was the express language of the permit (Exhibit A). The recovery at law by the plaintiffs from the city of the amount that must have been paid for the old vault space was no adjudication of any property right of the plaintiffs in those old vaults, but simply that they should not be compelled to pay twice therefor. In *Deshong* v. *City of New York*, 176 N. Y. 475, it was said that "whenever the existence of a vault would interfere with the public use of the street, the right to maintain it must be held to terminate, as the rights of individuals under such permits must be regarded as subordinate to the necessities or requirements of the public." So, in the case of *March* v. *City of New York*, Mr. Justice Bischoff, in his opinion at Special Term (which is printed in 69 App. Div. 3, where his conclusion was affirmed by the Appellate Division), said substantially that no trespass was disclosed in the destruction, by work done in pursuance of such authority as the city could give under its contract, of a vault maintained, presumptively, by virtue of a license from the city, though it is true that the justice concluded that the work was done in purported compliance with the statute, and without departure from the authority conferred thereby, matters which are hereafter considered. In *Scars* v. *Crocker*, *supra*, the court, after holding that the use of the subsurface of the streets for purposes of public travel was not an unreasonable use in reference either to travelers or abutters, said that the mere fact that it deprived abutters of the use of vaults and other similar underground structures in the street which they had theretofore maintained is of little consequence. The cases of *Parish* v. *Baird*, 160 N. Y. 302, 306, and *Matter of Bklyn Union El. R. R. Co.*, 105 App. Div. 112, where actions for damages to vaults were sustained, were controversies between the holders of the vault rights and third party wrongdoers; the taking of the vaults by the city for a public use was not in question. This brings us to the second contention of the plaintiffs. This, too, I think, must fail. The constitutional provision above referred to merely prohibited a legislative authorization of the construction or operation of a street railroad, except upon the condition precedent thereto, that the consent of the local authorities and of the owners of one-half in value of the abutting property, given by themselves, or, if refused by them, by commissioners, be first obtained; it does not require a detailed plan of the exact location of the road and all its appurtenances as a condition precedent to

securing the necessary consents. Reference, therefore, must be had to the language of the statute, the Rapid Transit Act, to determine the sufficiency of the proceedings to obtain the said consents. As the appropriate provisions thereof have been above specifically referred to, they need not now be repeated. It is true that it prescribes that the "general plan of construction" determined and established, with the route or routes of the proposed railway, by the board, prior to application for the said consents, shall show the general mode of operation and contain such details as to manner of construction as may be necessary to show the extent of encroachment on the public street and of the effect on abutting property. But there is no requirement that the details of construction, which can only be learned after great labor and expense, shall be determined and stated as a condition precedent to obtaining the consents, or that the consents are necessarily predicated thereon; on the contrary, section 6 of the act provides that the detailed plans and specifications for construction, "including the number, location and description of stations and plans and specifications for * * * landing places, platforms and stairways," were all to be prepared after the requisite constitutional and statutory consents had been obtained. It is true that the same section prescribed that the detailed plans and specifications should be "in accordance with the general plan of construction" previously determined and established, and, as a matter of fact, one of the numbered drawings produced and adopted by the board as showing the route and general plan adopted (Exhibit 12) showed a branch or loop opposite plaintiffs' premises which would have prevented the construction of a station in front thereof. But the route and general plans adopted by the board, after enumerating the streets through which the railroad is to run, the number of tracks and tunnels, the height and width of the latter, expressly leave many matters open for further consideration; thus at stations the width might be increased, the tracks should be along the center of the longitudinal streets of the route, "so far as may be practicable and convenient," the walls should not come within five feet of the exterior lines of said streets except at "stations (and) station approaches," which, "so far as practicable," should be at the intersection of streets, and built under streets or properly acquired private property, and siding accommodations not exceeding a quarter of a mile for each mile of roadway might be constructed. Furthermore, the express language of the resolutions establishing that route stated that the divergence of the loop or branch from the main line might begin at the most convenient point in Broadway between Bowling Green and Exchange place, and hence south of the plaintiffs' property; the drawing, therefore, showing a diversion opposite the plaintiffs' property north of Exchange place was erroneous. The plaintiffs did not appear before the Supreme Court commissioners for further particulars, or for correction or explanation of the error. The board obviously reserved the right of shifting the point of divergence as far south as Bowling Green, if convenient; it did so, without affecting in any way the plaintiffs' abutting property, except to benefit it, for by shifting the loop farther south the operations of the railway were brought farther away from their property. These considerations distinguish this situation from the so-called Barney cases. (*Barney* v. *Rapid Transit Com.*, 38 Misc. Rep. 549; *Huntington* v. *City of New York*, 118 Fed. Rep. 683; *Barney* v. *Same*, 39 Misc. Rep. 719; 83 App. Div. 237; *Barney* v. *N. Y.*, 193 U. S. 430.) In those no station was involved;

the drawings annexed to the route and general plans were expressly incorporated into and made part of the latter, and there, though the greatest permissible departure of the road from the center of the street was expressly measured and stated, the road, as constructed, wholly departed from the exact location established by such measurements. But it is further contended that the station actually constructed did not exactly conform to the typical station plan shown on the drawing (Exhibit No. 20). But the number, location and description of stations were to be fixed in the detailed plans, prepared after the consents were obtained, and were not fixed by the route and general plans; and, as the typical station was exclusively applicable to a street sixty feet wide intersecting the longitudinal street of the route at right angles, it was physically impossible to construct it at Rector street, less than forty feet wide, and intersecting Broadway at an acute angle. Moreover, though estoppel is not pleaded it is a significant circumstance, worthy of notice by a court of equity, that the station as erected was constructed with the full knowledge, acquiescence and almost co-operation of the plaintiffs, who provided for an entrance from it to their building until negotiations for its care and the cost of maintenance were broken off. The board of rapid transit commissioners, which has the exclusive control of the railroad property (*Interborough R. T. Co.* v. *City of New York*, 47 Misc. Rep. 221) evidently regard the space occupied by the brick wall as a present or future necessity, and the wall itself an incumbrance. For the reason above stated, I direct judgment in favor of the defendants, dismissing the complaint, with separate bills of costs. Settle decision and judgment on notice.

Ordered accordingly.

THE CITY OF NEW YORK, Plaintiff, *v.* INTERBOROUGH RAPID TRANSIT COMPANY and NEW YORK CITY INTERBOROUGH RAILWAY CO., Defendants.

(Supreme Court, New York Special Term, June, 1907.)

Street railways — Street railway companies, their franchises and right to use of streets — Nature and extent of rights granted.

Landlord and tenant — Rights, duties and liabilities in regard to premises — Possession, enjoyment and use — Use of premises — Purposes of use — Of subway under lease from New York City.

The railroad known as the "subway" is the property of the city of New York and the use thereof by the lessees of the city, including the ducts or passageways in the tunnel wall, is limited to railroad purposes, the transportation of persons, freight and express matter, and to purposes auxiliary thereto customarily attached to the operation of a railway or reasonably required for the convenience and accommodation of the public, or for the proper discharge of the lessee's duties to it; and the use of any of said ducts for the sale and transmission of electric currents for motive power to third parties, whether the owners or operators of connecting or intersecting railways or not, is not one of such uses and purposes, and will be restrained by injunction, although the lease contains no express grant of, and no express prohibition against, it.

ACTION for an injunction.

George L. Rives & Boardman, Platt & Soley, for plaintiff.

Strong & Cadwalader (George W. Wickersham, of counsel), for defendants.

FITZGERALD, J. This is an action to restrain the above-named defendant corporations, the former of which now operates the railroad commonly known as the "subway," in the boroughs of Manhattan and the Bronx, in the city of New York, and the latter of which operates a street surface railroad connecting with the "subway" at One Hundred and Eightieth street, in the borough of Manhattan; the one from furnishing and delivering and the other from receiving and using electrical current through certain ducts of masonry chambers built in the wall of said subway; and for an accounting by the defendants for the reasonable value of such current heretofore so furnished and used. The city is the owner of the railroad property known as the subway, having constructed the same at the public expense (met by a municipal bond issue of $35,000,000), under a contract with Mr. John B. McDonald, made pursuant to the Rapid Transit Act as it existed in 1900, and consisting of three parts or chapters, and providing generally that the contractor should construct and equip the said railroad and put the same in operation, and thereafter use, maintain and operate it under a lease from the city for a period of fifty years. Equipment was defined as including not only rolling stock but power houses and all devices whatsoever used for the generation or transmission of motive power. By chapter 3 of the contract, entitled "The Lease," the city let for said term the railway, terminals, stations and all other appurtenances, except equipment, for an annual rental equal to the annual interest payable by the city upon the bonds issued to pay for the construction, and, in addition, a further sum based upon percentages provided for in the instrument, payment of which latter sum might be postponed in the discretion of the Board of Rapid Transit Commissioners. The lease contains numerous general provisions and covenants, those most material to the issues in this action being briefly: That the railroad should be "of the very best character according to the highest modern standard in respect of safety, speed and convenience, and in all other respects;" that it would be operated "carefully and skillfully according to the highest known standards of railway operation;" that it might be used for the carriage of freight or express matter; provided that such did not to any extent or in any way interfere with its use for passenger traffic; that no advertisements in the stations or cars were to be permitted which should "interfere with easy identification of stations or otherwise with efficient operation;" that no use should be made of any part of the railroad or its equipment which should to any extent or in any way interfere "with such use to its fullest capacity for passengers;" that all reasonable requirements of the public in respect of frequency and character of its railway services to the full capacity of the road should be met; that the highest regard should be had to the safety of passengers and employees; that the railroad should be kept in repair, and the stations, cars, waiting rooms and tunnels should be kept clean, in thoroughly good order and condition, lighted, comfortable and ventilated, and that the railway might be fully inspected. Provision was also made for the rolling stock, the rate of fare, and for the purpose of equipment and the renewal of the lease at the expiration thereof. The motive power pre-

scribed was electricity or compressed air, with provision, however, for the use, if approved by the board, of any other superior motive power discovered in the development of the art of railway transportation. After the commencement of the work of construction provisions for the operation of the railroad by electricity according to the most modern methods necessitated decided modification of the plans, involving the building of a sufficient number of passageways or chambers in the side walls of the subway to accommodate the ducts or conduits for the transmission of electric current. This occasioned litigation over the question whether such modification constituted a revised plan of construction, which should be the absolute property of the city and for which the city should pay the contractor, or a part of the equipment to be furnished by the contractor. It was finally determined by the Appellate Division of this court that such modification of the work was part of the construction and not of the equipment of the road. (*Matter of McDonald*, 80 App. Div. 210, aff'd, on opinion of court below, 175 N. Y. 470). The additional expense — over $1,000,000 — was paid by the city and met by its bond issue, and the interest thereon, with the additional percentages before referred to, constitutes a part of the rental payable by the lessee to the city. In changing the plan of construction a greater number of ducts or passageways in the tunnel walls were constructed than have been required for the operation of the railroad up to the present time — thirty-two, for instance, having been constructed between Dyckman street and One Hundred and Eighty-first street, of which only eight are required and occupied by conduits carrying electrical current. Pursuant to section 34 of the Rapid Transit Act the said contractor assigned the lease part of the contract to the defendant Interborough Rapid Transit Company, which is now operating the railroad. It generates at a central power house owned by it a quantity of electricity, largely in excess of what is now used or may be necessary in the operation of its present railroad or of the extension thereof to Brooklyn; such electricity is conducted by means of conduits in the city streets to the line of the railroad and thence through other ducts in and part of the subway to substations belonging to the said defendant, where, its tension having been reduced, it is conveyed through ducts as before to various parts of the railway for the purpose of operating trains and heating, lighting and ventilating tunnels, stations and cars. One of such substations is situated near the intersection of Hillside avenue and Dyckman street, whence two electric cables are laid through two of the twenty-four ducts in Broadway, now otherwise unoccupied and not necessary for the present operations of the subway, to One Hundred and Eighty-first street, the point of connection with the street surface railroad operated by the other defendant. By means of those ducts and cables electric current has been and is transmitted to and furnished at that point by the defendant Rapid Transit Company to this other defendant for the operation of the latter's street surface railroad, under a written agreement providing for an interchange of traffic between them, and for the future delivery for a valuable consideration of such electric current as may be necessary for the operation of the street surface railroad and may not affect or impair in any way or to any extent the obligations to the city assumed by the defendant Rapid Transit Company under its lease of the subway, as above generally stated. One of these defendants, the Rapid Transit or Subway Company, is the owner of 55 per cent. of the capital stock of the other defendant, the Surface Railway Company. It is

conceded, as a matter of fact, that the amount of electricity so furnished and to be furnished to the surface railroad can be supplied by the defendant operating the subway without diminishing or affecting the amounts now used in operating the present subway or likely to be used in operating the extension thereof to Brooklyn. The contract or lease contains no express grant of and no express prohibition against the use of the ducts for the transmission and furnishing of electricity to third parties for a valuable consideration; and the question is presented whether the defendant, Interborough Rapid Transit Company has the power to use said ducts for a purpose not expressly or impliedly prohibited by the instrument constituting the contract and lease and admittedly not affecting its operation of the subway, or whether it can only use such property for such purposes as are plainly or by necessary implication included within that instrument. Considering the nature and the object of the Rapid Transit Act, the rights and obligations and the relations between the State, the city, the Board of Rapid Transit Commissioners and the contractor, created and established thereby, the peculiar nature of the instruments signed by the city's representatives, the Rapid Transit Board, the contractor and the latter's assignee, into which instruments the said Rapid Transit Act was expressly incorporated, the public character of the demise and the nature of the covenants to be performed by the contractor or lessee, it must be held that the rules of construction applicable to the case of an ordinary lease of a parcel of land by one party to another, according to which the lessee has the right to the exclusive use of the demised premises for any purpose not prohibited by the lease, are not applicable, but that, on the other hand, the canons of interpretation governing the construction of public grants, privileges or franchises require that the instruments in question must be construed more favorably to the public and more strongly against the contractor, passing, at the most, no greater rights than are plainly or by necessary implication included therein; that the use by the contractor or lessee of the subway structure, including the said ducts, is limited to railroad purposes, the transportation of persons, freight and express matter, to purposes auxiliary thereto customarily attached to the operation of a railway or reasonably required for the convenience and accommodation of its patrons, the public, or for the proper discharge of its duties to them; and, finally, that the sale and delivery of electric current for motive power to another railroad corporation is not one of such uses or purposes. The objects of the Legislature in the enactment of the Rapid Transit Act, and of the city of New York in making the contract authorized thereby and incorporating said act, were not to enable the city to favorably invest its money or favorably lease its property then in existence; they were rather to promote and facilitate the travel of persons and the commerce of the city, which by reason of the geographical situation of the city had become so congested as to necessitate the railway structure authorized by the act and provided for by the contract. (*Sun Printing & Pub. Assn.* v. *Mayor, etc.*, 152 N. Y. 257, 273.) The right or franchise to use the public streets or highways vested in and could be made only by the Legislature, representing the State; it was not derived from the city or the Rapid Transit Board, but from the State, which constituted the Rapid Transit Board its agent, expressly delegating to that board the power to prescribe the manner and conditions of the exercise of the rights, privileges and franchises conferred upon the contractor or lessee by the Rapid Transit

Act, including, among other things, the rates of fare, character of service and general rules of operation. (Rapid Transit Act, page 35.) A direct legislative grant, to the company gratuitously made, based solely upon the service to be rendered to the public, was not made in this case, as had formerly been the custom. Here the Legislature chose an agent, the Rapid Transit Board, for the exercise of its power and for the accomplishment of its purposes as disclosed in the Rapid Transit Act. (*People ex rel. Murphy* v. *Kelly*, 76 N. Y. 475, 483.) That board, for the State endeavored to contract directly with individuals and companies representing private capital to construct and operate the railroad, but without success; the city was compelled to construct it to meet the great public need referred to, and in accordance with the authority conferred by and after compliance with the conditions expressed in the Rapid Transit Act it provided for its construction and operation by an instrument in writing, nominally and in fact a contract and a lease, whereby rights and privileges in its streets of the nature of franchises, and necessarily exclusive, were granted to the contractor not as heretofore, gratuitously, not merely because of services to be rendered to the public, but for money compensation expressed in the form of annual rent computed on the cost of construction. The novelty and magnitude of the enterprise, upon which private capital would not venture under a contract directly with the representatives of the State, necessitated a change in method and compelled the intervention of the city and its credit, and the newly adopted policy of the State required provision for the payment of suitable money compensation for the rights, privileges and franchises in the public streets. But neither the enforced intervention of the city nor the said provision changed the nature of the rights conferred upon the contractor or lessee, which were of the nature of public franchises, involving the constant performance of service to the public, and to the construction of the terms and effect of which well established rules apply. *Charles River Bridge*, 11 Pet. 420; *People ex rel. Third Ave. Railroad Co.* v. *Newton*, 112 N. Y. 396, and *Blair* v. *City of Chicago*, 201 U. S. 463, where it is said that "one who asserts private rights in public property under grants of the character of those under consideration must, if he would establish them, come prepared to show that they have been conferred in plain terms, for nothing passes by the grant except it be clearly stated or necessarily implied." The cases cited by counsel for the defendants involving ordinary leases of lands between individuals, viz., *Baldwin* v. *Morgan*, 43 Hun, 355; *Riddle* v. *Littlefield*, 53 N. H. 503, and *Lovell* v. *Strahan*, 145 Mass. 1, are consequently inapplicable. The first two cases are further distinguished in that the lessees therein used the portions of the demised premises to advertise the sale of their own wares, for which they evidently leased the main premises, so that the said use was properly and necessarily incident and contributory to the purposes of the lease. Furthermore, all of the covenants to be performed by the lessee or contractor, as above briefly enumerated, indicate that the property was to be used only for railroad purposes. It is contended that the provision of the contract or lease that the contractor should not "make any use of the railroad or any part of it, or of its equipment, which shall to any extent or in any way interfere with such use to its fullest capacity for passengers," indicates that the property might be used for some purpose other than the mere transportation of passengers, because, as respondent argues in its brief, "this restrictive covenant would have been wholly superfluous had the contractor not been vested by the lease contract

with the right to use the property not only for the carriage of passengers, freight and express matter, but for such collateral uses as such property is customarily put to by corporations operating a similar class of railroads." This language does not require the construction and effect claimed for it. It is equally consistent with the conclusion that no more was intended than that all the purposes other than the transportation of passengers, freight and express matter, for which the railroad property might be legally used as above stated, viz., purposes auxiliary to such transportation, customarily attached to the operation of a railroad or necessarily required for the convenience and accommodation of its patrons, the public, must be subordinated by the contractor to the primary purpose of the railway, viz., its "use to the fullest capacity for passengers." Nor is the case of *Interborough R. T. Co.* v. *City of N. Y.*, 47 Misc. Rep. 221, authorizing the use of the walls of the tunnel for advertising purposes, authority for the right to the use of the property claimed in this case, for there the court, after indicating that the right to place advertisements on the walls of the tunnel was a benefit which custom attached to the operation of a railway, noted the language of the contract or lease, viz., the contractor should not permit "advertisements in the stations or cars which should interfere with easy identification of stations or otherwise with efficient operation," and properly concluded therefrom that the contract itself recognized the right of the lessee to maintain advertising signs upon the stations, since it regulated the manner in which the advertising matter should be displayed. See also the decision of Mr. Justice McCall of this court (*City of N. Y.* v. *Interborough R. T. Co.*, 53 Misc. Rep. 126), refusing to enjoin the maintenance of certain automatic weighing and vending machines in the stations of the subway, was based partly upon the fact recognized by the court that their use and maintenance was practically a universal custom, commonly accompanying the operation by a railway company of its railway; the cases cited by the counsel for the defendants holding, in effect, that a corporation may do all acts auxiliary to the corporate business, not only those necessarily implied, but also such as are for convenience and accommodation, provided they be germane to its main objects and that for all such reasonable purposes, though not embraced in the primary object of the charter, it may use its own corporate property. *Lafond* v. *Deems*, 81 N. Y. 515; *Swift* v. *Pacific Mail Steamship Co.*, 106 id. 217; *Jacksonville, Mayport P. R. Nav. Co.* v. *Hooper*, 160 U. S. 525; *Starin* v. *New York*, 42 Hun, 555; *Peo. ex rel., etc.*, v. *Knight*, 67 App. Div. 398; *Green Bay and N. Railroad Co.* v. *Union Steamship Co.*, 107 U. S. 109; *Pierce* v. *Boston, etc., Railroad Co.*, 141 Mass. 481, and *Foster* v. *London, Chatham & Dover Ry. Co.*, L. R. (1 Q. B. Div.) 711 (1895), are not applicable. There is a radical distinction between the use by the corporation operating the road or exercising the franchise of the property belonging not to itself but to the public, and the beneficial and profitable employment by it of its own property, purchased and owned by it, which would otherwise be idle and unproductive. The case of *N. Y. Mail & Newspaper Transportation Co.* v. *Shea*, 30 App. Div. 266, establishing the right of the trustees of the New York and Brooklyn bridge, owned by the cities of New York and Brooklyn, to contract with a private corporation for the establishment and maintenance of a pneumatic tube line for the speedy transmission of mails is authority, not on the question of the right of the railroad corporation to use the public prop-

erty here contended for, but on the authority of the Rapid Transit Board to expressly contract for the use of the ducts in question. And in *Brooklyn Heights Railroad Co.* v. *City of Brooklyn*, 152 N. Y. 244, the right of the corporation to build tracks in streets not named in the certificate of incorporation was sustained because necessary for the public convenience, reasonably essential to a proper discharge of its duties to the public, and fairly implied as a means of the amplest exercise of the powers specifically given which was consistent with the object and purpose of the public grant. Here the many ducts, now unoccupied, were constructed as part of the first or original structure to anticipate the public needs occasioned by the probable extensions of the subway system, and because of the difficulty, if not impossibility, of constructing them or adding to them after the subway wall was constructed. Indeed, apart from the requirements of future extensions, they may become necessary for the transmission of a motor power superior to electricity which may be disclosed by the future development of the railway art. The use of these ducts for the sale and transmission of electric current for motor power to third parties, whether the owners and operators of connecting or intersecting railroads or not, is a use of the public property contrary to the plain purpose of the Rapid Transit Act, not reasonably contemplated by the parties to the instrument of contract and lease executed thereunder, in no sense a railway use within the rules above stated, and, in so far as the company seeks to charge the cost of the generation and transmission of such electric current against the sum upon which its indebtedness to the municipality shall be computed, manifestly unjust to the city. Judgment should, therefore, be rendered in favor of the plaintiff for the relief demanded in the complaint, with costs.

APPENDIX O.

ORDERS OF THE COMMISSION.

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ORDERS OF THE COMMISSION.

Resolutions, general in their application and requiring the furnishing of certain statistical, property and franchise information by the corporations, have been formally adopted and filed as orders. There have been fourteen (14) of these resolutions adopted, as follows: Orders Nos. 1, 2, 3, 4, 6, 8, 8a, 22, 27, 28, 53, 54, 136, 137.

Under the provisions of the Public Service Commissions Act and under the rules adopted by the Commission, any person or corporation, aggrieved by any act or thing done or omitted by any corporation under the jurisdiction of the Commission, may complain to the Commission of such act, or omission, such complaint to be in writing.

A copy of the complaint is then forwarded to the corporation complained of accompanied by an order directed to such corporation requiring that the matters complained of be satisfied, or that the charges be answered in writing within a time to be specified in the order. The time specified is usually ten (10) days, and the orders are known as 10-day orders or complaint orders.

NOTE I.— There have been 84 of these 10-day orders issued, all being except for names and dates substantially in the following form:

STATE OF NEW YORK

PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT.

....., Complainant, *vs.* ....., Defendant.	Order No. — by Commissioner

This matter coming on upon the complaint of by which it appears that said complainant is aggrieved by acts done or omitted to be done by said defendant, and set forth in said complaint, which are claimed to be in violation of some provision of law or of the terms and conditions of defendant's franchise or of an order of this Commission,

Now, upon said complaint, it is

Ordered, That a copy of the said complaint be forwarded to said defendant and that the matters therein complained of be satisfied or the charges in said

complaint set forth be answered by said defendant within ten (10) days after service upon it of this order, exclusive of the day of service.

Dated, ..., 190 .

....,
Commissioner.

Ordered, This ..... day of ....., 19.., that the foregoing order be and the same hereby is approved and confirmed by the Public Service Commission for the First District, and ordered filed in its office.

By the Commission,

....,
Secretary.

STATE OF NEW YORK, }
COUNTY OF NEW YORK, } *ss.:*

I, TRAVIS H. WHITNEY, Secretary of the Public Service Commission for the First District, do hereby certify, that I have compared each of the above with the original orders of the said Commission and of the Commissioner, and that they are correct transcripts therefrom and of the whole of the originals.

IN TESTIMONY WHEREOF, I have hereunto subscribed my hand and affixed the seal of the Commission this .... day of ....., 19...

....,
Secretary.

These 10-day orders are filed under the following designations: Orders Nos. 5, 7, 23, 29, 30, 31, 34, 35, 36, 37, 39, 40, 41, 42, 47, 49, 51, 55, 56, 58, 61, 62½, 63½, 64, 65, 67, 68, 69, 70, 72, 73, 74, 79, 80, 81, 82, 83, 84, 85, 86, 90, 91, 92, 93, 94, 95, 96, 97, 98, 102, 103, 105, 106, 109, 110, 113, 115, 116, 117, 118, 119, 120, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 139, 140, 141, 142, 143, 144, 154, 155, 163, 169.

If the complaint be satisfied and the Commission notified of the fact, no further proceedings are taken.

If, however, the charges be not satisfied, and it appears to the Commission that there are reasonable grounds for the complaint, or if the corporation complained of demands a hearing, an order for a hearing is issued of which both the complainants and the corporation receive proper notice, or the Commission may on its own motion issue an order for a hearing.

There have been 46 such orders for hearings issued, including Order No. 166, which was for a rehearing.

FORM NOTE II.— Those issued on the motion of the Commission frequently specify in numbered or lettered items the specific matters to be inquired into.

FORM NOTE III.—The orders for hearings issued on complaint and answer are substantially in the following form:

STATE OF NEW YORK

PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT.

....., Complainant, *vs.* ....., Defendant.	Order No. — by Commissioner

Upon the complaint of ..... herein, dated....., on which Order No. .... was issued ....., and the answer of the ..... thereto, dated .....

Ordered, That upon the matters therein, a hearing be had on the .... day of ....., 190 , at ..... o'clock in the afternoon, or at any time or times to which the same may be adjourned, at the rooms of the Commission at No. 154 Nassau street, borough of Manhattan, city and State of New York.

To the end that the Commission may make such order or orders in the premises as shall be just and proper.

Further ordered, That said ....., of ....., ..., borough of ....., New York city, and the said ..... Company, be given at least ..... days' notice of such hearing, by service upon each of them, either personally or by mail, of a certified copy of this order, and that at such hearing they may be afforded all reasonable opportunity for presenting evidence and examining and cross-examining witnesses as to the matters aforesaid.

Dated, NEW YORK, ..., 190 .

(Signed) .....,
Commissioner.

By the Commission:

Ordered, This .... day of ....., 190.., that the foregoing order be and the same hereby is approved and confirmed by the Public Service Commission for the First District and ordered filed in its office.

.....,
Secretary.

STATE OF NEW YORK, }
COUNTY OF NEW YORK, } *ss.:*

I, TRAVIS H. WHITNEY, Secretary of the Public Service Commission for the First District, do hereby certify, that I have compared the above with the original order adopted by said Commission, and that it is a correct transcript therefrom and of the whole of the original.

IN TESTIMONY WHEREOF, I have hereunto subscribed my hand and affixed the seal of the Commission this ..... day of ....., 1908.

.....,
Secretary.

FORM NOTE IV.— Orders for hearings issued upon the complaint of a citizen or corporation and the answer of the railroad company in some instances in-

clude itemized statements of the particular points at issue and to be inquired into.

The orders for hearings are filed under the following designations: Orders Nos. 10, 11, 13, 14, 15, 16, 18, 19, 20, 25, 26, 32, 38, 48, 57, 59, 66, 75, 76, 77, 78, 87, 88, 89, 100, 101, 104, 108, 111, 114, 121, 135, 145, 147, 148, 149, 150, 151, 152, 157, 158, 159, 160, 162, 166, 170.

After the close of the hearing and investigation, it is the duty of the Commission to make, file and serve an order known as a final order, either dismissing the complaint or directing the corporation complained of, to satisfy the cause of complaint in whole, or to the extent specified in the order, or to make such other further or different improvement or changes as the Commission shall determine to be just, reasonable and proper.

There have been forty-two (42) of these final orders issued, including the orders requiring the Interborough Metropolitan Company and the Metropolitan Securities Co. to allow the Commission's special accountant to examine their books, accounts and memoranda (Orders Nos. 12 and 17); the resolutions filed as orders issued on the applications of the Nassau Electric Railroad Company and the Long Island Railroad Company, respectively, (Orders Nos. 9 and 167); the order requiring the Interborough Rapid Transit Company to obtain proposals for constructing additional stairways at its One Hundred and Thirty-seventh street and One Hundred and Forty-fifth street stations (Order No. 24); and the order establishing a uniform system of accounting for railroad corporations subject to its jurisdiction (Order No. 180).

These final orders together with the fourteen (14) general resolutions of the Commission filed as orders, are set forth in full below.

ORDER NO. 1.— ADOPTED JULY 30, 1907.

Resolved, That the following order covering the report of accidents by common carriers, railroad corporations and street railroad corporations, be adopted, and that copies thereof be served upon such corporations within the jurisdiction of this Commission.

ORDER.

Every common carrier, railroad corporation and street railroad corporation over which this Commission has jurisdiction, is hereby required to give notice to this Commission of every accident happening upon any line of railroad or street railroad, owned, operated or leased by it, in the following manner:

First, In case of

I. Accident resulting in death or serious injury to persons;

II. Collision resulting in serious damage to cars;

III. Derailment of elevated or subway trains or railroad passenger trains; or

IV. Serious interference with or stoppage of traffic.

Such notice shall be given by telephone immediately after the happening of the accident, or, if the accident happens after 11 o'clock p. m., then at 8 o'clock a. m., of the following day, and such notice shall give the nature and location of the accident or event. Such notice shall be followed by a written statement, addressed and mailed to the Commission as soon as possible and

within three days thereafter, and such written statement shall contain the following information:

(a) The name of the corporation owning the road.

(b) The name of the corporation leasing or operating the road.

(c) The date and hour of the accident.

(d) The precise location of the accident.

(e) The number and description of the car involved in the accident.

(f) The names and places of residence of employees in any way connected with the occurrence.

(g) The names and addresses of passengers or other persons killed or injured.

(h) The names and residences of employees killed or injured, and the extent of the injury.

(i) The circumstances attending and the supposed cause of the accident, with the names and residences of all witnesses who saw the accident or can give any facts in reference to the same.

Second, Written notice of every accident happening upon any line of railroad, owned, operated, controlled or leased by any such railroad corporation or street railroad corporation, shall be given by such railroad corporation or street railroad corporation to the Public Service Commission by mailing to such Commission a written statement thereof within forty days thereafter. This statement shall consist of a classification, according to their nature, of all accidents, including those reported by telephone.

This order is to take effect on August 5, 1907, and shall continue in effect for two years therefrom.

ORDER No. 2.— ADOPTED JULY 8, 1907.

Resolved, That preliminary to the preparation of a uniform system of accounts and of the forms of accounts, records and memoranda to be prescribed for use by railroad and street railroad corporations and other common carriers, this Commission request each and every railroad and street railroad corporation and other common carrier, subject to its jurisdiction, to submit, on or before July 22, 1907, to this Commission copies of such accounts, records and memoranda as are now in use by them.

ORDER No. 3.— ADOPTED JULY 8, 1907.

Resolved, That preliminary to the preparation of a uniform system of accounts, records and books to be prescribed for use by persons and corporations engaged in the manufacture, sale and distribution of gas and electricity, all persons and corporations engaged in such business be requested to submit to this Commission on or before July 22, 1907, copies of such accounts, records and books as are now kept by them.

ORDER No. 4.— ADOPTED JULY 8, 1907.

Resolved, That preliminary to the preparation of forms for accounts, records and memoranda of the movement of traffic to be prescribed for use by the railroad and street railroad and common carriers, subject to the jurisdiction of this Commission, such corporations and common carriers be requested to submit to this Commission, on or before July 22, 1907, copies of said accounts,

records and memoranda as are now kept by them relating to the movement of traffic; and

That such corporations and common carriers be requested to submit by such time a complete statement showing as of July 1, 1907, schedules of cars or trains, or other services for the conveyance of passengers, operated by said corporations or common carriers, which shall include a statement showing the exact time when each car or train is scheduled to leave the starting point to reach its destination; the seating capacity of such cars or trains; the routes operated by such corporations or common carriers; the number, character and seating capacity of passenger cars that will be available for use on September 1, 1907; and the number, character and capacity of passenger cars that were available for use on September 1, 1906, and September 1, 1905.

ORDER NO. 5.— ADOPTED JULY 18, 1907.

Resolved, That a copy of letter of complaint from W. W. Niles, chairman of the committee on streets, of the Automobile Club of America, be sent to the Union Railway Company, with a copy of the rules of this Commission, and with directions that the same be satisfied or answer thereto made within ten days.

(Complaint served with this order was regarding dangerous location of trolley poles on Jerome avenue in the Bronx.)

ORDER NO. 6.—ADOPTED JULY 18, 1907.

Whereas, This Commission is vested by law with the general supervision of all common carriers, street railroads, railroad corporations, and corporations controlling and operating street railroads within its jurisdiction, and not only has the power, but is charged with the duty to keep informed as to the general condition of all such railroads and corporations, their capitalization, their franchises, and the manner in which their lines, owned, leased, controlled, or operated, are managed, conducted and operated, not only with respect to the adequacy, security and accommodation afforded by the service, but also with respect to their compliance with all the provisions of law; and,

Whereas, Practically the entire street railroad service of the boroughs of Manhattan and the Bronx are controlled by the Interborough Metropolitan Company and operated in its interest; and,

Whereas, The Brooklyn Heights Railroad Company, Brooklyn, Queens County and Suburban Railroad Company, Coney Island and Gravesend Railway Company, Transit Development Company, American Railway Traffic Company, South Brooklyn Railway Company, Seabeach Railway Company, Nassau Electric Railway Company, Brooklyn Union Elevated Railroad Company, Brooklyn City Railroad Company, Prospect Park and Coney Island Railroad Company, in the boroughs of Kings and Queens, are all owned and controlled by and operated in the interest of the Brooklyn Rapid Transit Company; and,

Whereas, All of the corporations hereinbefore referred to are required by law to furnish such service and facilities as shall be safe and adequate and in all respects just and reasonable, and are also required by law to interchange passengers, freight and property traffic between the lines owned, operated, controlled or leased by every such corporation; and,

Whereas, It is necessary for this Commission to determine whether it shall make certain orders to enforce the performance of adequate service by the street railway corporations within its jurisdiction, and take steps to compel the transfer of passengers under the provisions of section 35 of the Public Service Commissions Law; and,

Whereas, It is necessary to inform itself as required by law as to precisely the manner in which corporations within its jurisdiction are operated and controlled, as well as the manner and the measure of their capitalization and financial condition, and their ability to render those public services for which they were chartered; now, therefore, be it

Resolved, That this Commission shall forthwith, as required by sections 45 and 48 of the Public Service Commissions Law, investigate and examine the general condition of the Interborough Metropolitan Company and the Brooklyn Rapid Transit Company, and of all companies controlled by and operated in the interest of either of the said companies, their capitalization, their franchises, and the manner in which their lines, owned, leased, controlled or operated, are managed, conducted and operated, including the adequacy, security and accommodation afforded by their service, and with respect to their compliance with all provisions of law, and also for the purpose of determining as the result of such investigation whether the said corporations do in fact illegally and as monopolies control and operate the several properties now under their control and operated in their interests, for the purpose of determining what is the capacity of each of the individual corporations so owned and controlled to render adequate service as required by law, and for the purpose of determining and performing the duties of this Board in the premises.

Resolved, That the resolutions be referred to the Chairman to outline such course and take such steps as may seem to be best to carry out the purpose of the same.

ORDER No. 7.— ADOPTED JULY 29, 1907.

Resolved, That the following order be adopted.

Ordered, That a copy of the communication of James C. Smith as to the service of the Union Railway Company be served upon that company and that it be, and is hereby, ordered to answer thereto on or before August 5, 1907.

ORDER No. 8.—ADOPTED AUGUST 2, 1907.

Resolved, That the following be adopted and that it be served upon the various street, surface, elevated and subway railroads in this district:

You are hereby required to furnish within thirty days copies of the following documents relative to each and every company operated or controlled by you, whether by lease or sublease, by stock ownership or by joint agreement. These documents called for may be sworn copies or verified copies of the originals. Each document, if filed in a public office, shall be so indicated. Dates of filing should be given in every case. Duplicates are not required, but where a document has once been filed it should thereafter be referred to as having been already filed:

1. Certificate of incorporation.
2. Supplemental or amended certificates of incorporation.
3. Certificate of extension of route,

4. Certificate relative to capital stock, whether increase or decrease.

5. Consolidation agreements.

6. Consents of local authorities, constituting franchise rights.

7. Consents of local authorities relative to change in motive power.

8. Certificates of the Board of Railroad Commissioners as to public convenience and a necessity.

9. Certificates of the Board of Railroad Commissioners relative to change in motive power.

10. Certificates of the Board of Railroad Commissioners relative to changes in the capital stock, securities and bonds.

11. Certificates of abandonment of route.

12. Leases.

13. Deeds and other documents in the chain of your title.

14. Location of all real property owned in fee.

15. Location of all real property leased.

16. All traffic and trackage agreements, including agreements with express companies and other companies operating upon any portion of your lines.

17. Affidavits of employees of your company that necessary property owners' consents have been secured in each instance where necessary; state whether the same have been filed in the county clerk's office.

18. Copies of all agreements with Dock Department, Bridge Commissioners or other municipal or Federal authorities.

19. A statement giving description of same, date of filing and in what office filed, as to each map filed by your company in the office of the county clerk or in the office of the register.

20. A copy of all proceedings of the Rapid Transit Commissioners affecting your company, including orders, determinations and locations of routes. If such are in the minutes of the Board of Rapid Transit Commissioners since 1901, they may be referred to by volume and page without furnishing copies.

21. Enumerate the various lines operated by you; where the franchises of two or more companies are used in the operation of a line, describe such operated route in detail, stating what franchises are used in such operation.

22. A map drawn to a scale of at least 2,500 feet to an inch, showing all routes operated by you, and indicating thereon owned routes in solid black, leased routes in red, routes operated by joint agreement in blue, solid lines indicating underground electric routes, dashed lines indicating horse routes, and broken lines indicating overhead trolley routes.

23. A reference to all court decisions affecting the validity of any of your franchises.

24. A copy of any other documents constituting a link in the chain of your muniments of title.

The foregoing refers in each case to each company in your system, except where otherwise noted.

ORDER NO. 8-A—ADOPTED AUGUST 20, 1907.

Resolved, That the following be adopted and that it be served upon the various gas and electric companies in this district:

You are hereby required to furnish within thirty days from the 23d day of August, 1907, copies of the following documents relative to each and every

company operated or controlled by you, whether by lease or sublease, by stock ownership or by joint agreement. These documents called for may be sworn copies or verified copies of the originals, and if filed in a public office, that fact should be so indicated with the date of filing:

1. Certificate of incorporation.
2. Supplemental or amended certificates of incorporation.
3. Any act of the Legislature granting, confirming or limiting any right or franchise of the corporation, or affecting the right of the corporation to use or exercise any franchise.
4. Certificates relative to changes in the capital stock.
5. Any consolidation or merger agreement between companies now operating in connection with your plant.
6. Consents of local authorities constituting franchise rights.
7. Certificates from the State or municipal authorities, including departments, affecting your franchises.
8. Copies of all mortgages executed by you or by companies in your system.
9. Copy of all leases, deeds, contracts or other documents in the chain of your title.
10. Location of all real estate owned in fee, described by metes and bounds.
11. Location of all real estate leased, described by metes and bounds.
12. Copy of any contracts executed between companies in your system or other companies as to the purchase or sale of gas or electricity.
13. Reference to court decisions, affecting the validity of your franchises.
14. As of July 1, 1907, the location of your plant or plants, and system, with a full description of your property and franchises, stating in detail how each franchise stated to be owned was acquired.
15. A map drawn to a scale of at least 2,500 feet to the inch, showing all pipes, conduits and other structures constructed or now maintained by you in the public streets.

The foregoing refers in each case to each company in your system, except where otherwise noted.

In the Matter of The Application of the NASSAU ELECTRIC RAILROAD COMPANY for the Permission and Approval of this Commission to the Construction and Operation of an Extension of its Street Surface Railroad upon the Routes Described in the Statement and Certificate Filed by the said Corporation with the Secretary of State and the Clerk of Kings County on the 14th day of June, 1905.	ORDER No. 9.—ISSUED AUGUST 13, 1907.

The Nassau Electric Railroad Company having made application to the Public Service Commission for the First District, by a petition duly verified

and filed and accompanied by the documents required by the rules of practice of the Commission, for the permission and approval of the Commission to the construction and operation of an extension to its street surface railroad, upon the routes described in the statement and certificate filed pursuant to section 90 of the Railroad Law with the Secretary of State and county clerk of Kings county on the 14th day of June, 1905, the following being a description of the streets, roads, avenues and highways in and upon which it is proposed to construct, maintain and operate such extension, viz.:

Along and upon Livingston street, from Court street to Flatbush avenue; on Flatbush avenue, from Livingston street to Lafayette avenue; and on Lafayette avenue from Flatbush avenue to Fulton street, by a double track street surface electric railroad to be operated by the overhead single trolley system, together with the necessary poles, wires and equipment with connections at Court street, Third avenue, Flatbush avenue, Lafayette and Flatbush avenues and Lafayette avenue and Fulton street with tracks of the Brooklyn City Railroad Company; at Boerum place with tracks of the Nassau Electric Railroad Company, and at Smith street with tracks of the Coney Island and Brooklyn Railroad Company.

And the Commission having fixed Monday, August 12, 1907, at three o'clock p. m., in its rooms at 320 Broadway, in the borough of Manhattan, city of New York, for a hearing upon said petition and upon said hearing, which was held by the Commission at the time and place aforesaid, the said applicant, the Nassau Electric Railroad Company, having appeared by T. S. Williams, its vice-president, and George D. Yeomans, its counsel, having presented allegations and made its proofs whereby it satisfied the Commission that the construction and operation of said extension is necessary and convenient for the public service, and that said petitioner means in good faith and has sufficient financial ability, to construct and operate such extension, and due consideration having been had; it is

Ordered, That the application be and the same hereby is granted; and the Public Service Commission for the First District does hereby determine that the construction and operation of said extension is necessary and convenient for the public service and does hereby permit and approve of the construction and operation of said extension.

ORDER NO. 10.— ISSUED AUGUST 29, 1907.

Order against New York City Railway Company for hearing to inquire into adequacy of service on Fourth and Madison avenue line and to determine what, if any, increases should be required.

For form, see Form Note II, above.

ORDER NO. 11.— ISSUED AUGUST 29, 1907.

Order against Brooklyn Rapid Transit Company, Brooklyn Heights Railroad Company, Brooklyn, Queens County and Suburban Railroad Company, Nassau Electric Railroad Company, and Coney Island and Gravesend Railway Company for hearing to inquire whether operation of ash cars in daytime should be prohibited in Brooklyn.

For form, see Form Note II, above.

In the Matter of The Inspection and Examination of the Accounts, Records and Memoranda Kept by the Interborough Metropolitan Company.	ORDER No. 12.— ISSUED SEPTEMBER 29, 1907.

It is ordered, That Marvyn Scudder, who is employed by this Commission as an accountant, be designated and is hereby directed to inspect and examine the accounts, records and memoranda kept by the Interborough Metropolitan Company, and all books of original entry, all ledgers, all balance sheets, and any and all other books showing or purporting to show the assets and liabilities of the corporation.

And the said Interborough Metropolitan Company is hereby directed and required to afford to said Marvyn Scudder access to all such accounts, records and memoranda; and it is further

Ordered, That this order shall take effect forthwith and continue in force for a period of six months from the date hereof, and that said corporation is required to notify this Commission within five days from the date of service hereof whether the terms of this order are accepted and will be obeyed.

ORDER No. 13.— ISSUED AUGUST 29, 1907.

Order against Interborough Rapid Transit Company for hearing to inquire whether 20 per cent. increase in service on elevated and subway lines in New York county should be required to be put in force for one hour and a half both before and after operation of prevailing fullest schedule, every day except Sundays and holidays, and whether service on Sundays and holidays should be increased.

For form, see Form Note II, above.

ORDER No. 14.— ISSUED AUGUST 29, 1907.

Order against Interborough Rapid Transit Company for hearing to inquire whether service between West Farms and stations on Second and Third avenue elevated roads in Manhattan should be increased by operation between 6 a. m. and 10 p. m. of a number of through trains to and from West Farms, over said elevated roads, so that one-half of the trains between 149th street and West Farms shall be subway trains and one-quarter Third avenue elevated trains and one-quarter Second avenue elevated trains, running alternately.

For form, see Form Note II, above.

ORDER No. 15. —ISSUED AUGUST 29, 1907.

Order against New York City Railway Company for hearing to inquire into adequacy of service on Broadway line and lines run in connection therewith, over Columbus avenue and Lenox avenue, and to determine what, if any, increases should be ordered.

For form, see Form Note II, above.

ORDER NO. 16.— ISSUED AUGUST 29, 1907.

Order against American Railway Traffic Company for hearing to inquire whether operation of ash cars in the daytime should be prohibited in Brooklyn.

For form, see Form Note II, above.

In the Matter
of
The Inspection and Examination of the Accounts, Records and Memoranda Kept by the METROPOLITAN SECURITIES COMPANY.

ORDER NO. 17.— ISSUED SEPTEMBER 29, 1907.

It is ordered, That Marvyn Scudder, who is employed by this Commission as an accountant, be designated and is hereby directed to inspect and examine the accounts, records and memoranda kept by the Metropolitan Securities Company, and all books of original entry, all ledgers, all balance sheets, and any and all other books showing or purporting to show the assets and liabilities of the corporation.

And the said Metropolitan Securities Company is hereby directed and required to afford to said Marvyn Scudder access to all such accounts, records and memoranda.

It is further ordered, That this order shall take effect forthwith and continue in force for a period of six months from the date hereof, and that said corporation is required to notify this Commission within five days from the date of service hereof whether the terms of this order are accepted and will be obeyed.

ORDER NO. 18.— ISSUED SEPTEMBER 13, 1907.

Order against Union Railway Company to inquire into the adequacy of service on surface lines in the Bronx, and to determine what, if any, increases should be ordered.

For form, see Form Note II, above.

ORDER NO. 19.—ADOPTED AUGUST 21, 1907.

Order against Coney Island and Brooklyn Railroad Company to inquire into safety and adequacy of equipment and to determine what, if any, improvements therein should be required.

For form, see Form Note II, above.

ORDER NO. 20.— ISSUED SEPTEMBER 13, 1907.

Order against Union Railway Company for hearing in the matter of the complaint of James C. Smith regarding failure to run Williamsbridge cars through to 242d street.

For form, see Form Note IV, above.

In the Matter of The Order for Hearing Issued to the CONEY ISLAND AND BROOKLYN RAILROAD COMPANY, Regarding Improved and Additional Equipment and Appliances.	ORDER NO. 21.— ISSUED SEPTEMBER 13, 1907.

This matter coming on upon the report of the hearing had herein on September 4 and September 11, 1907, and it appearing that said hearing was held by and pursuant to an order of this Commission made August 21, 1907, and returnable on the said 4th day of September, 1907; that said order was duly served upon the said Coney Island and Brooklyn Railroad Company, and that said service was by it duly acknowledged; that said hearing was held by and before this Commission on the matters in said order specified on said September 4, 1907, and by adjournment on September 11, 1907, Mr. Commissioner Bassett presiding, and William N. Dykman, of the firm of Dykman & Kuhn, attorneys, appearing at the said hearing for and on behalf of the said Coney Island and Brooklyn Railroad Company.

Now, it being made to appear by the proceedings upon said hearing that the equipment and appliances of the said Coney Island and Brooklyn Railroad Company are inadequate in the particulars hereinafter mentioned, and that it will be adequate, just, reasonable and proper that the equipment and appliances of the said Coney Island and Brooklyn Railroad Company should be supplemented in the particulars hereinafter set forth,

Therefore, on motion of Abel E. Blackmar, counsel to the Commission, it is *Ordered*, as follows, to wit:

1. That the said Coney Island and Brooklyn Railroad Company provide ten (10) new combination cars, each with fifty horse power equipments for use on its Smith street line, on or before January 1, 1908.

2. That the said Coney Island and Brooklyn Railroad Company provide and equip its cars in service with improved circuit breakers, either such as are made by the General Electric Company or such as are equivalent thereto, on or before November 15, 1907.

3. That the said Coney Island and Brooklyn Railroad Company provide and equip all its cars in service with efficient gear pans, on or before October 1, 1907.

4. That the said Coney Island and Brooklyn Railroad Company provide and maintain for each and every one of its cars in service, two good and sufficient headlights.

5. That the said Coney Island and Brooklyn Railroad Company place and maintain car numbers conspicuously in the middle of the platforms of each closed car in service.

6. That the matter of the providing of the remaining forty of the fifty horse power equipments specified in said order for hearing, be dismissed without prejudice to further proceeding upon a new complaint or upon the motion of the Commission.

It is further ordered, That this order shall take effect on September 15, 1907, and shall continue in force until complied with in every particular, and

that within five days the said Coney Island and Brooklyn Railroad Company notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

ORDER NO. 22.—ADOPTED SEPTEMBER 12, 1907.

Resolved, That the following be adopted for service upon the various railroad corporations, street railroad corporations and common carriers in this district:

You are hereby required to furnish within thirty days after the date of service of a certified copy hereof upon you, copies of the following documents, relative to each and every company owned, operated, or controlled by you, whether by lease, or sublease, by stock ownership or by joint agreement. These documents called for may be sworn copies or verified copies of the originals. Each document, if filed in a public office, should be so indicated. Dates of filing should be given in every case. Duplicates are not required, but where a document has once been filed with this Commission, it should thereafter be referred to as having been already filed, with the date of filing:

1. Certificate of incorporation.
2. Supplemental or amended certificates of incorporation.
3. Certificate of extension of route.
4. Certificate relative to capital stock, whether increase or decrease.
5. Consolidation agreements.
6. Consents of local authorities, constituting franchise rights.
7. Consents of local authorities, relative to change in motive power.
8. Certificates of the Board of Railroad Commissioners as to public convenience and a necessity.
9. Certificates of the Board of Railroad Commissioners relative to change in motive power.
10. Certificates of the Board of Railroad Commissioners relative to changes in the capital stock, securities and bonds.
11. Certificates of abandonment of route.
12. Leases.
13. Deeds.
14. Location of all real property now owned in fee.
15. Location of all real property now under lease.
16. All traffic and trackage agreements, including agreements with express companies or other companies operating upon any portion of your lines.
17. Affidavits of employees of your company that necessary property owner's consents have been secured in each instance where necessary; state whether the same have been filed in the county clerk's office.
18. Copies of all agreements with Dock Department, Bridge Commissioners or other municipal or Federal authorities.
19. A statement giving description of same, date of filing, and in what office filed, as to each map filed by your company in the office of the county clerk or in the office of the register.
20. A copy of all proceedings of the Rapid Transit Commissioners affecting your company, including orders, determinations and locations of routes. If such are in the minutes of the Board of Rapid Transit Commissioners since 1901, they may be referred to by volume and page without furnishing copies.

21. Enumerate the various lines operated by you; where the franchises of two or more companies are used in the operation of a line, describe such operated route in detail, stating what franchises are used in such operation.

22. A map drawn to a scale of not more than 1,000 feet to an inch, showing all routes operated by you, and indicating thereon owned routes in solid black, leased routes in red, routes operated by joint agreement in blue, solid lines indicating underground electric routes, dashed lines indicating horse routes and broken lines indicating overhead trolley routes, lines operated by other methods of traction in green.

23. A referee to all court decisions affecting the validity of any of your franchises.

24. A copy of any other documents perfecting your franchises.

25. Final orders vesting title by eminent domain.

26. Any act of the Legislature constituting an original charter.

27. Any act of the Legislature granting, confirming or limiting any right or franchise of the corporation or affecting the right of the corporation to use or exercise any franchise.

The foregoing refers in each case to each company in your system, except where otherwise noted.

ORDER NO. 23.— ISSUED SEPTEMBER 18, 1907.

Ten day order on complaint of the Civic League of The Bronx against New York Central Railroad Company, New York and Putnam Railroad Company and New York and Harlem Railroad Company regarding inadequate local service in The Bronx.

For form, see Form Note I, above.

ORDER NO. 24.— ADOPTED SEPTEMBER 18, 1907.

Resolved, That the Interborough Rapid Transit Company be, and are hereby, ordered to obtain proposals for constructing one additional stairway to the east platform of the One Hundred and Thirty-seventh street and Broadway station, and one additional stairway to the east platform of the One Hundred and Forty-fifth street and Broadway station, in accordance with Public Service Commission plans Nos. T-339 and T-329 and T-330, respectively, such additional detail, supplementary plans and specifications as may be required and to be furnished to the Interborough Rapid Transit Company by the Public Service Commission; said proposals to be submitted to the Public Service Commission for its approval before any work is proceeded with; and,

It is further resolved, That the work of constructing the above stairways, when authorized, is to be executed and paid for as an extra under Contract No. 1 entered into between John B. McDonald and the city of New York, February 21, 1900.

ORDER NO. 25.— ISSUED SEPTEMBER 25, 1907.

Order against Forty-second Street, Manhattanville and St. Nicholas Avenue Railway Company to inquire into adequacy of service on Boulevard and Broadway lines, and to determine what, if any, increases therein should be required.

For form, see Form Note II, above.

ORDER NO. 26.— ISSUED SEPTEMBER 27, 1907.

Order against Richmond Light and Railroad Company for hearing to inquire whether operation of cars around curve at Richmond and New York avenues was safe, and if found to be unsafe, to determine what changes should be required therein.

For form, see Form Note II, above.

ORDER NO. 27.— ADOPTED SEPTEMBER 30, 1907.

Resolved, That the following be adopted and that it is to be served upon the various gas corporations in this district:

1. Each gas corporation shall provide and keep in or upon its premises, to be proved and stamped or marked by the Commission for testing and proving the accuracy of gas meters, two provers for each meter tester assigned to such premises, and each prover shall be equipped with thermometers, washers, connections, hose and such other appliances as may be necessary to make each prover complete in every respect and ready for use. Each gas corporation shall further provide suitable benches on which meters may be placed when being tested and sealed, and also suitable benches for placing the record book used by the tester.

2. Each gas corporation shall provide and attach to each meter to be tested a suitable ring so placed that when filled with wax and sealed by a tester it will be impossible to open the meter without destroying the seal.

3. No prover or any other apparatus shall be used until it shall have been inspected, approved and stamped or marked by the Commission, and notice posted to this effect upon premises. All apparatus shall be inspected and approved at least once every year.

4. Any meter removed from a consumer's premises shall not be re-installed there nor installed upon the premises of any other consumer until proved and sealed by this Commission. When removed such meter shall be replaced only with a meter bearing the seal of the Commission, and no meter shall be put in use which does not bear the seal of the Commission.

5. When a consumer submits a written request to the Commission to test the meter through which gas is supplied to him, the Commission will serve written notice upon the gas corporation to remove the meter complained of to a testing station, where it will be tested by an inspector of the Commission. Said corporation shall remove such meter to the testing station within five days after the receipt of said notice. The gas corporation, at the time of such removal, shall place a meter sealed by the Commission, in the stead of the meter removed.

6. If upon a test a meter shall be found to be incorrect, the gas corporation shall cause such meter to register correctly before the same shall be sealed by an inspector of the Commission.

7. When a gas corporation submits a written request to the Commission according to the forms prescribed by it to test a meter, the Commission will authorize its removal to a testing station and will then prove it, provided a tag or label be attached or affixed to such meter giving the name and address of the person from whose premises it was removed.

ORDER NO. 28.— ADOPTED OCTOBER 4, 1907.

Resolved, That the following order covering the report of accidents by gas and electric corporations be adopted, and that copies thereof be served upon such corporations within the jurisdiction of this Commission.

Every gas and electric corporation over which this Commission has jurisdiction is hereby required to give notice to this Commission of every accident happening upon its premises, or in connection with the manufacture and distribution of gas or electricity by it, which results in loss of life or any injury to person, or any interference with the constant supply of gas or electricity to any consumer or consumers.

Such notice shall be given by written statement addressed and mailed to the Commission as soon as possible, and within five days, after the accident has occurred, and such written statement shall be on a form prescribed by the Commission, and shall contain the following information:

Date and hour of accident.
Precise location of accident.
Name of person injured.
Address of person injured.
Age of person injured.
Sex of person injured.
Occupation of person injured.
Employee of company or not.
Regularly or temporarily employed.
Length of service with company.
Nature and extent of injury.
Where taken after injury.
Is death probable?
Probable duration of disability.
Name of attending physician.
Address of attending physician.
Names of witnesses of accident.
Addresses of witnesses of accident.
Was injured person obeying instruction at time of accident?
By whom were these instructions given?
Was accident due to negligence of injured person?

Give an exact and detailed description of the accident and its cause, supplementing by a sketch if same will make the explanation clearer.

Name of corporation.
Address of corporation.
Name of person reporting accident.
Date of report.

This order shall take effect on October 15, 1907, and shall continue in effect for two years therefrom.

ORDER NO. 29.— ISSUED OCTOBER 4, 1907.

Ten day order on complaint of Henry G. Kost against New York, New Haven and Hartford Railroad Company regarding maintenance of smoke nuisance.

For form, see Form Note I, above.

ORDER NO. 30. ISSUED OCTOBER 9, 1907.

Ten-day order on the complaint of John E. Thompson against Union Railway Company and Interborough Rapid Transit Company regarding discrimination in fares charged between Westchester and points within the city.

For form, see Form Note I, above.

ORDER NO. 31. ISSUED OCTOBER 9, 1907.

Ten-day order on the complaint of Gilbert Ray Hawes against Interborough Rapid Transit Company regarding inadequate stairway facilities at Station Ninth Avenue and Cortlandt street.

For form, see Form Note I, above.

ORDER NO. 32.— ISSUED OCTOBER 9, 1907.

Order against Coney Island and Brooklyn Railroad Company for hearing to determine whether service and equipment on Smith street line was reasonable, proper and adequate and if found not to be, to determine what increases and improvements should be required.

For form, see Form Note II, above.

In the Matter of The Hearing on the Motion of the Commission on the Question of the Service of the INTERBOROUGH RAPID TRANSIT COMPANY, under an order bearing date the 29th day of August, 1907, as to an Increase of Service through Subways and over Elevated Railroads by twenty per cent. in Excess of Present Operating Schedules, in the Respects as therein Mentioned.	ORDER NO. 33.— ISSUED OCTOBER 9, 1907.

This matter coming on upon the report of the hearing had herein on the 19th day of September, 1907, the 27th day of September, the 30th day of September, 1907, and the 2d day of October, 1907, and it appearing that said hearing was held by and pursuant to an order of this Commission made August 29, 1907, and returnable on the said 19th day of September, 1907, and that the said order was duly served upon the said Interborough Rapid Transit Company, and that the said service was by it duly acknowledged, and that said hearing was held by and before this Commission on the matters in said order specified on said September 19, 1907, Mr. Commissioner Willcox presiding, and without taking proof adjourning such hearing by consent, and thereafter by adjournment duly had on the 27th day of September, 1907, 30th day of September, 1907, and 2d day of October, 1907, Mr. Commissioner Eustis presiding, and at all said four sessions, Mr. Alfred A. Gardner, general solicitor for the said Interborough Rapid Transit Company, appearing for the said Interborough Rapid Transit Company, and Mr. Oliver C. Semple, assistant counsel for the Commission, appearing for the Commission.

Now, it being made to appear by the proceedings upon the said hearing that the service of the said Interborough Rapid Transit Company in the transportation of persons in the first district, has been and is, on the lines at the points and at the times set forth, as follows, to wit:

Subway Express Trains.

1. South bound, Grand Central station, from 7 to 7.30 a. m., 88 cars.
2. South bound, Grand Central station, from 8.30 to 9 a. m., 104 cars.
3. North bound, Fourteenth street station, from 5 to 5.30 p. m., 112 cars.
4. North bound, Fourteenth street station, from 6.30 to 6.45 p. m., 48 cars.

Second Avenue Elevated.

1 North bound, Forty-second street station, from 6.10 to 6.50 a. m., 40 cars.
2. South bound, Thirty-fourth street station, from 6.15 to 7 a. m., 94 cars.
3. South bound, Thirty-fourth street station, from 7 to 8.30 a. m., 239 cars.
4. North bound, Forty-second street station, from 5 to 6.30 p. m., 239 cars.
5. North bound, Forty-second street station, from 6.30 to 7 p. m., 63 cars.
6. North bound, Forty-second street station, from 7.15 to 8.09 p. m., 50 cars.
7. North bound, Forty-second street station, from 8.31 to 9.08 p. m., 25 cars.

Third Avenue Elevated.

1. South bound, Thirty-fourth street station, from 6 to 6.30 a. m., 63 cars.
2. South bound, Thirty-fourth street station, from 6.30 to 7 a. m., 98 cars.
3. South bound, Thirty-fourth street station, from 7 to 8 a. m., 294 cars.
4. South bound, Thirty-fourth street station, from 8.30 to 9 a. m., 98 cars.
5. North bound, Forty-second street station, from 5 to 6 p. m., 252 cars.
6. North bound, Forty-second street station, from 6.30 to 7 p. m., 140 cars.
7. North bound, Forty-second street station, from 7 to 7.45 p. m., 133 cars.
8. North bound, Forty-second street station, from 9.11 to 9.36 p. m., 25 cars.

Sixth Avenue Elevated.

1. South bound, Fiftieth street station, from 7.30 to 9 a. m., trains from Harlem, 168 cars; trains from Fifty-eighth street, 75 cars; total, 243 cars.
2. North bound, Fiftieth street station, from 5 to 6.30 p. m., trains to Harlem, 219 cars; trains to Fifty-eighth street, 75 cars; total, 294 cars.

Ninth Avenue Elevated.

North bound, Thirty-fourth street station, from 5 to 6 p. m., 90 cars.

And it further appearing, That the said service as hereinbefore set forth has been and is inadequate in the particulars hereinafter mentioned, and that it will be adequate, just, reasonable and proper that the said service of the said Interborough Rapid Transit Company should be supplemented in the particulars hereinafter set forth, upon the lines, at the points and at the times so hereinafter set forth,

Therefore, on motion of Abel E. Blackmar, counsel to the Commission,

It is ordered, as follows, to wit:

That the said service of the said Interborough Rapid Transit Company, upon the lines, at the point and at the times hereinafter set forth, except on

Saturday afternoons, Sundays and holidays, be increased in the particulars and by the means hereinafter stated, as follows, to wit:

Subway Express.

1. South bound, at Grand Central station, from 7 to 7.30 a. m., by an increase of 16 cars, rendered by 2 trains from West Farms, upon said line.

2. South bound, at Grand Central station, from 8.30 to 9 a. m., by an increase of 8 cars, rendered by 1 train from West Farms, upon said line.

3. North bound, at Fourteenth street station, from 5 to 5.30 p. m., by an inincrease of 8 cars, rendered by 1 train to West Farms, upon said line.

4. North bound, at Fourteenth street station, from 6.30 to 6.45 p. m., by an increase of 8 cars, rendered by 1 train to West Farms, upon said line.

Second Avenue Elevated.

1. North bound, at Forty-second street station, from 6.10 to 6.50 a. m., by an increase of 16 cars.

2. South bound, at Thirty-fourth street station, from 6.15 to 7 a. m., by an increase of 21 cars, rendered by 3 trains of 7 cars each, from One Hundred and Twenty-ninth street to South Ferry.

3. South bound, at Thirty-fourth street station, from 7 to 8.30 a. m., by an increase of 21 cars, rendered by 3 trains of 7 cars each, from One Hundred and Twenty-ninth street to South Ferry.

4. North bound, at Forty-second street station, from 5 to 6.30 p. m., by an increase of 21 cars, rendered by 3 trains of 7 cars each, from South Ferry to One Hundred and Twenty-ninth street.

5. North bound, at Forty-second street station, from 6.30 to 7 p. m., by an increase of 14 cars, rendered by 2 trains of 7 cars each, from South Ferry to One Hundred and Twenty-ninth street.

6. North bound, at Forty-second street station, from 7.15 to 8.09 p. m., by an increase of 20 cars.

7. North bound, at Forty-second street station, from 8.31 to 9.08 p. m., by an increase of 10 cars.

Third Avenue Elevated.

1. South bound, at Thirty-fourth street station, from 6 to 6.30 a. m., by an increase of 7 cars, rendered by 1 train of 7 cars, from One Hundred and Seventy-ninth street or Bronx park.

2. South bound, at Thirty-fourth street station, from 6.30 to 7 a. m., by 14 cars, rendered by 2 trains of 7 cars each, from One Hundred and Seventy-ninth street or Bronx park to City Hall.

3. South bound, at Thirty-fourth street station, from 7 to 8 a. m., by an increase of 28 cars, rendered by 4 trains of 7 cars each, from One Hundred and Seventy-ninth street of Bronx park to City Hall.

4. South bound, at Thirty-fourth street station, from 8.30 to 9 a. m., by an increase of 28 cars, rendered by 4 trains of 7 cars each, from One Hundred and Twenty-ninth street to City Hall.

5. North bound, at Forty-second street station, from 5 to 6 p. m., by an increase of 42 cars, rendered by 6 trains of 7 cars each, from City Hall to One Hundred and Seventy-ninth street.

6. North bound, at Forty-second street station, from 6.30 to 7 p. m., by an increase of 7 cars, rendered by 1 train of 7 cars, from City Hall to Bronx park.

7. North bound, at Forty-second street station, from 7 to 7.45 p. m., by an increase of 14 cars, rendered by 2 trains of 7 cars each, from City Hall to Bronx park or One Hundred and Seventy-ninth street.

8. North bound, at Forty-second street station, from 9.11 to 9.36 p. m., by an increase of 10 cars.

Sixth Avenue Elevated.

1. South bound, at Fiftieth street station, from 7.30 to 9 a. m., by an increase of 28 cars, to the trains from Harlem.

2. North bound, at Fiftieth street station, from 5 to 6.30 p. m., by an increase of 33 cars, to the Harlem trains.

Ninth Avenue Elevated.

At Thirty-fourth street station, north bound, from 5 to 6 p. m., by an increase of 18 cars, rendered by 3 trains of 6 cars each, from Rector street to One Hundred and Thirty-fifth street.

And it is further ordered, That this order shall take effect in the particulars hereinafter mentioned and at the times hereinafter set forth, to-wit:

First, As to the subway express trains, items 1, 2, 3 and 4, on Monday, October 14, 1907.

Second, As to the Second avenue elevated, items 1, 2, 6 and 7, on Monday, October 14, 1907.

Third, As to the Third avenue elevated, items 1, 4, 6, 7 and 8, on Monday, October 14, 1907.

Fourth, As to the Second avenue elevated, items 3, 4 and 5, on Wednesday, November 20, 1907.

Fifth, As to the Third avenue elevated, items 2, 3 and 5, on Friday, October 25, 1907.

Sixth, As to the Sixth avenue elevated items 1 and 2, on Friday, October 25, 1907.

Seventh, As to the Ninth avenue elevated, on Wednesday, November 20, 1907.

And it is further ordered, That this order shall continue in force from and after the taking effect of the same, as to each such item, until April 1, 1908, but without prejudice to an order for further or additional hearings and action thereon by the Commission in respect of anything herein prescribed, prior to the expiration of said period.

And it is further ordered, That within five days, the said Interborough Rapid Transit Company notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

ORDER NO. 34.— ISSUED OCTOBER 11, 1907.

Ten day order on the complaint of Albert Firmin, C. M. Sheehan and Joseph Schreiber against Brooklyn Union Elevated Railroad Company regarding inadequate and improper service on elevated lines in Brooklyn.

For form, see Form Note I, above.

ORDER No. 35.— ISSUED OCTOBER 11, 1907.

Ten day order on complaint of Albert Firmin, C. M. Sheehan and Joseph Schreiber against Brooklyn Union Elevated Railroad Company regarding inadequate and improper service on Brooklyn bridge and elevated lines in Brooklyn.

For form, see Form Note I, above.

ORDER No. 36.— ISSUED OCTOBER 11, 1907.

Ten day order on the complaint of Flatbush Taxpayers' Association against Brooklyn Union Elevated Railroad Company and Brooklyn Heights Railroad Company regarding failure to issue transfers from Nostrand avenue trolley line to Fulton street elevated line.

For form, see Form Note I, above.

ORDER No. 37.— ISSUED OCTOBER 11, 1907.

Ten day order on the complaint of Grant Smith against Interborough Rapid Transit Company regarding alleged violation of the eight hour day law.

For form, see Form Note I, above.

ORDER No. 38.— ISSUED OCTOBER 11, 1907.

Order against Brooklyn Heights Railroad Company for hearing to inquire whether service on Lexington avenue Elevated line and Jamaica avenue surface line was reasonable and adequate, and if not found so to be, to determine what increases should be required.

For form, see Form Note II, above.

ORDER No. 39.— ISSUED OCTOBER 11, 1907.

Ten day order on the complaint of Frank Bennett against Brooklyn Heights Railroad Company regarding improper maintenance of stringers and ties underneath running rails on Brooklyn bridge.

For form, see Form Note I, above.

ORDER No. 40.— ISSUED OCTOBER 11, 1907.

Ten day order on the complaint of Robert E. Anthony against Brooklyn Heights Railroad Company regarding imperfect repair of curves and cross-overs at various points.

For form, see Form Note I, above.

ORDER No. 41.— ISSUED OCTOBER 16, 1907.

Ten day order on the complaint of William H. Keating against New York and Harlem Railroad Company and New York Central and Hudson River Railroad Company regarding failure to construct subway loop at Grand Central station.

For form, see Form Note I, above.

ORDER NO. 42.— ISSUED OCTOBER 21, 1907.

Ten day order on the complaint of West End Board of Trade against Nassau Electric Railroad Company and Sea Beach Railway Company regarding failure to issue transfers at junction of Bay Ridge avenue and Fifth avenue, Brooklyn.

For form, see Form Note I, above.

In the Matter
of
The Hearing on the Motion of the Commission on the Question of the Adequacy of the Service and Equipment of the NEW YORK CITY RAILWAY COMPANY in Respect to the Broadway Line. Under the Order for Hearing Made August 29, 1907.

ORDER NO. 43.— ISSUED OCTOBER 23, 1907.

This matter coming on upon the report of the hearing had herein on the 16th day of September, 1907, the 23d day of September, 1907, the 7th day of October, 1907, the 9th day of October, 1907, and the 14th day of October, 1907, and it appearing that the said hearing was held by and pursuant to an order of this Commission made August 29, 1907, and returnable on the 16th day of September, 1907, and that the said order was duly served upon the said New York City Railway Company and that said service was by it duly acknowledged, and that said hearing was held by and before the Commission on the matters in said order specified on the said 16th day of September, 1907, and by adjournment duly had, on the 23d day of September, 1907, and at both said sessions proof was taken before Mr. Commissioner Maltbie, presiding, James L. Quackenbush, Esq., appearing for the New York City Railway Company, Abel E. Blackmar, Esq., appearing for the Commission, and by adjournment duly had on the 7th day of October, 1907, before Mr. Commissioner Maltbie, Arthur DuBois, Esq., appearing for the Commission and no one appearing for the New York City Railway Company, and proof being taken, and by adjournment duly had on the 9th day of October, 1907, before Mr. Commissioner Maltbie, Abel E. Blackmar, Esq., appearing for the Commission, and Daniel W. Patterson, Esq., appearing for the New York City Railway, and proof being taken and by adjournment duly had on the 14th day of October, 1907, before Mr. Commissioner Maltbie, Abel E. Blackmar, Esq., appearing for the Commission, and Daniel W. Patterson, Esq., appearing for the New York City Railway Company, and proof having been taken;

And it appearing that in an action in the Circuit Court of the United States for the South District of New York, in equity, between the Pennsylvania Steel Company and the Degnon Contracting Company, as complainants, and the New York City Railway Company, as defendants, an order was duly entered appointing Adrian H. Joline, Esq., and Douglas Robinson, Esq., temporary receivers of the New York City Railway;

And it further appearing that on the 5th day of October, 1907, the said receivers were duly served with notice of the continued hearing in this matter held at the office of the Commission on October 9th, which notice advised the

said receivers of the matters upon which the hearing was had, and extended to them an opportunity to attend, introduce testimony and examine and cross-examine witnesses;

And it further appearing that the said receivers elected not to attend at any of the hearings,

Now it being made to appear by the proceedings upon the said hearing that the service of the New York City Railway in the transportation of persons in the first district on the Broadway lines has been and is unreasonable, improper and inadequate in that between the hours of six in the morning and seven in the evening the said New York City Railway Company does not run enough cars on Broadway, south of Houston street, reasonably to accommodate the traffic offered for transportation to it, and that it will be just, reasonable and proper that the said service of the New York City Railway Company on Broadway south of Houston street should be supplemented in the particulars hereinafter set forth upon the lines at the points and at the times so hereinafter set forth;

And it further appearing that the regulations, practices, equipment, appliances and service of the New York City Railway Company in respect to transportation of persons in the first district, is unjust, unreasonable and improper and inadequate in that destination signs showing the points of destination of the cars are not provided and conspicuously displayed upon each car run over the said Broadway line, and that it will be just, reasonable and proper to require the said New York City Railway Company to display destination signs conspicuously on each car run over its Broadway line;

Therefore, On motion of Abel E. Blackmar, Esq., Counsel to the Commission,

It is ordered, That the service of the New York City Railway Company on its Broadway lines be supplemented and changed as follows:

First, By running on Broadway, south of Houston street, at least as far as Murray street, all cars operated by the New York City Railway Company on its Broadway lines, between the hours of six o'clock in the morning and seven o'clock in the evening, except such cars as may be disabled or cars on which repairs may be immediately necessary.

Second, By providing and conspicuously displaying on each car run over any of its Broadway lines a destination sign which shall clearly state and show the destination of the car.

And it is further ordered, That this order shall continue in force for a period of two years from and after the taking effect of the same but without prejudice to an order for further or additional hearings and action thereon by the Commission in respect of anything herein prescribed, prior to the expiration of said period of two years.

And it is further ordered, That the provisions of this order shall apply to and be binding upon Adrian H. Joline and Douglas Robinson as receivers of the New York City Railway Company, and shall apply to and be binding upon their successors in the same manner that the New York City Railway Company would be bound if the receivers were not in possession.

And it is further ordered, That before November 1, 1907, the said New York City Railway Company and Adrian H. Joline and Douglas Robinson, as receivers of the New York City Railway Company, notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

In the Matter of The Hearing on the Motion of the Commission on the Question of the Adequacy of the Service and Equipment of the FORTY-SECOND STREET, MANHATTANVILLE AND ST. NICHOLAS AVENUE RAILWAY COMPANY, in Respect to the Broadway Line. Under Order for Hearing Made September 25, 1907.	ORDER No. 44.— ISSUED OCTOBER 23, 1907.

This matter coming on upon the report of the hearing had herein on the 7th day of October, 1907, and it appearing that the said hearing was held by and pursuant to an order of this Commission made September 25, 1907, and returnable on the 7th day of October, 1907, and that the said order was duly served upon the Forty-second Street, Manhattanville and St. Nicholas Avenue Railway Company, and that the said service was by it duly acknowledged, and the said hearing was held by and before the Commission on the matters in said order specified on October 7, 1907, and by adjournment duly had on October 9, 1907, and by adjournment duly had on October 14, 1907, and at all of said sessions proof being taken before Mr. Commissioner Maltbie, presiding, Arthur DuBois, Esq., appearing for the Commission at the session of October 7, 1907, and at all other sessions Abel E. Blackmar, Esq., appearing for the Commission, and D. W. Patterson, Esq., appearing for the Forty-second Street, Manhattanville and St. Nicholas Avenue Railway Company,

Now, it being made to appear by the proceedings upon the said hearing that the Forty-second Street, Manhattanville and St. Nicholas Avenue Railway Company is operating its cars on Broadway, borough of Manhattan, city of New York, over the tracks of the New York City Railway Company pursuant to and under the terms and conditions of certain traffic agreements or contracts, under which the said Forty-second Street, Manhattanville and St. Nicholas Avenue Railway Company may run its cars in Broadway to the southern end of the line.

And it being made to appear by the proceedings upon the said hearing that the service of the Forty-second Street, Manhattanville and St. Nicholas Avenue Railway Company in the transportation of persons in the first district on the Broadway line is unreasonable, improper and inadequate, in that between the hours of six in the morning and seven in the evening the said Forty-second Street, Manhattanville and St. Nicholas Avenue Railway Company does not run enough cars on Broadway, south of Houston street, reasonably to accommodate the traffic offered for transportation to it, and that it is just, reasonable and proper and is reasonably necessary to accommodate and transport the traffic offered that the said service of the Forty-second Street, Manhattanville and St. Nicholas Avenue Railway Company on Broadway south of Houston street should be supplemented in the particulars hereinafter set forth;

And it further appearing that the regulations, practices, equipment, appliances and service of the Forty-second Street, Manhattanville and St. Nicholas Avenue Railway Company, in respect to the transportation of persons in the first district, is unjust, unreasonable, improper and inadequate in that destination signs showing the points of destination of the cars are not provided and conspicuously displayed upon each car run over the said Broadway line, and that it will be just, reasonable and proper to require the said Forty-second Street, Manhattanville and St. Nicholas Avenue Railway Company to display destination signs conspicuously on each car run over its Broadway line,

Therefore, On motion of Abel E. Blackmar, Esq., counsel to the Commission,

It is ordered, That the service of the Forty-second Street, Manhattanville and St. Nicholas Avenue Railway Company be supplemented and changed as follows:

First, By running on Broadway south of Houston street at least as far as Murray street no less than one car in every four cars operated by it south of Forty-sixth street; *provided, however*, that between the hours of six o'clock and nine o'clock in the morning, daily except Sundays, the said Forty-second Street, Manhattanville and St. Nicholas Avenue Railway Company shall run south of Houston street at least as far as Murray street on Broadway a minimum number of seventeen cars; and that between the hours of nine o'clock in the morning and four o'clock in the afternoon, daily except Sundays, the said railway company shall run south of Houston street at least to Murray street on Broadway a minimum number of fifty cars; and that between the hours of four o'clock and seven o'clock in the afternoon, daily except Sundays, the said railway company shall run south of Houston street at least to Murray street on Broadway a minimum number of forty cars.

Second, By providing and conspicuously displaying on each car run over its Broadway line a destination sign which shall clearly state and show the destination of the car.

And it is further ordered, That this order shall take effect on November 1, 1907.

And it is further ordered, That this order shall continue in force as long as the Forty-second Street, Manhattanville and St. Nicholas Avenue Railway Company operates its Broadway cars over the Broadway tracks of the New York City Railway Company, but in no event for a period greater than two years from and after the taking effect of this order, but without prejudice to an order for further or additional hearings and action thereon by the Commission in respect of anything herein prescribed, prior to the expiration of said period of two years.

And it is further ordered, That before November 1, 1907, the said Forty-second Street, Manhattanville and St. Nicholas Avenue Railway Company notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

In the Matter of The Complaint of JAMES C. SMITH against the UNION RAILWAY COMPANY OF NEW YORK AND WESTCHESTER ELECTRIC RAILROAD COMPANY. Williamsbridge cars at Two Hundred and Thirty-third street.	ORDER NO. 45.— ISSUED OCTOBER 25, 1907.

This matter coming on, on complaint of James C. Smith, and the answer thereto of the Union Railway Company of New York city, and the report of the hearing had thereon on the 27th day of September, 1907, the 4th day of October, 1907, and the 11th day of October, 1907, and it appearing that said hearings were held by and pursuant to an order of the Commission made and entered the 13th day of September, 1907, and returnable on the said 27th day of September, 1907, and that the said order was duly served upon the said Union Railway Company of New York city and that said service was by it duly acknowledged and that said hearing was held by and before this Commission on the matters specified in the said complaint and answer and in said order for a hearing on the said September 27, 1907, October 4, 1907, and October 11, 1907, Mr. Commissioner Eustis, presiding, and Mr. Edward A. Maher, president of said Union Railway Company of New York, and Mr. Ambrose F. McCabe, attorney, appearing for said Union Railway Company, and Oliver C. Semple, Esq., assistant counsel, appearing for the Commission, and the Westchester Electric Railroad Company having also voluntarily appeared on the said hearing as if named in said complaint and order for hearing and consenting to be subject thereto by Mr. Edward A. Maher, its president, and Mr. Ambrose F. McCabe, its attorney,

Now, it being made to appear by the said complaint, answer and the proceedings on said hearing that the said Union Railway Company of New York and the said Westchester Electric Railroad Company are street railroads; that in the city of New York, in the first district, State of New York, the said Union Railway Company as such has tracks and franchises from Bedford park on Webster avenue, Olin avenue and White Plains road to at or about 219th street, connecting at that point with tracks and franchises on said White Plains road of the said Westchester Electric Railroad Company, running to the New York city line at or about 242d street, forming a continuous line of tracks and franchises for transportation from 198th street, Bedford park, to the northerly line of the city of New York, over the said Webster avenue, Olin avenue and White Plains road; that the said Union Railway Company and Westchester Electric Railroad Company have in respect of their separate tracks and franchises in the city of New York, including those aforesaid, an operating contract or agreement for use by each of the tracks and franchises of the other; that the regulations, practices and service of the said Union Railway Company and Westchester Electric Railroad Company, in respect to the transportation of persons in the first district are

unjust, unreasonable, improper and inadequate, in making 233d street on White Plains road the terminus of the Williamsbridge line of cars, and that it is just, reasonable, safe, adequate and proper to fix and prescribe regulations, practices and service to be enforced and to be observed in respect of such transportation of persons in the first district, as hereinafter set forth.

Therefore, On motion of Abel E. Blackmar, Counsel to the Commission, it is

Ordered, as follows, to wit:

That the said Union Railway Company, instead of terminating the service of the Williamsbridge line of cars at 233d street on White Plains road, shall run and operate the said Williamsbridge line of cars to and from the city line at or near 242d street on White Plains road, and that the said Westchester Electric Railroad Company shall allow and permit the additional service hereinbefore prescribed, so far as the same is to be given upon its tracks and under its franchise; and it is further

Ordered, That this order shall take effect on the 31st day of October, 1907, and shall continue in force from and after the taking effect of the same for a period of twelve months; and it is further

Ordered, That within five days the said Union Railway Company of New York and the said Westchester Electric Railroad Company notify the Public Service Commission for the first district whether the terms of this order are accepted and will be obeyed.

In the Matter of The Complaint of JAMES C. SMITH against the UNION RAILWAY COMPANY OF NEW YORK CITY and WESTCHESTER ELECTRIC RAILROAD COMPANY. Bedford Park and New Rochelle Express Line.	ORDER No. 46.— ISSUED OCTOBER 25, 1907.

This matter coming on, upon complaint of James C. Smith, and the answer thereto of the Union Railway Company, of New York city, and the report of the hearing had thereon on the 27th day of September, 1907, the 4th day of October, 1907, and the 11th day of October, 1907, and it appearing that said hearings were held by and pursuant to an order of the Commission made and entered the 13th day of September, 1907, and returnable on the said 27th day of September, 1907, and that the said order was duly served upon the said Union Railway Company of New York city and that said service was by it duly acknowledged and that said hearing was held by and before this Commission on the matters specified in the said complaint and answer and in said order for hearing on the said September 27, 1907, October 4, 1907 and October 11, 1907, Mr. Commissioner Eustis, presiding, and Mr. Edward A. Maher, president of said Union Railway Company of New York city, and Mr. Ambrose F. McCabe, attorney, appearing for said Union Railway Company,

and Oliver C. Semple, Esq., assistant counsel, appearing for the Commission, and the Westchester Electric Railroad Company having also voluntarily appeared on the said hearing as if named in said complaint and order for hearing and consenting to be subject thereto by Mr. Edward A. Maher, its president, and Mr. Ambrose F. McCabe, its attorney.

Now, It being made to appear by the said complaint answer and the proceedings on said hearing that the said Union Railway Company and the said Westchester Electric Railroad Company are street railroads; that in the city of New York in the first district, State of New York, the said Union Railway Company as such has tracks and franchises from Bedford Park on Webster avenue, Olin avenue to White Plains road, at or about 219th street, connecting at that point with tracks and franchises on said White Plains road, of the said Westchester Electric Railroad Company, running to the New York city line at or about 242nd street, forming a continuous line of tracks and franchises for transportation from 198th street, Bedford Park, to the northerly line of the city of New York, over the said Webster avenue, Olin avenue and White Plains road; that the said Union Railway Company and Westchester Electric Railroad Company have in respect of their separate tracks and franchises in the city of New York, including those aforesaid, an operating contract or agreement for the use by each of the tracks and franchises of the other, with fare to and from the city line of five cents (5c.) for each passenger, with the right to each such passenger to receive at designated places, that is to say, at Bedford Park at 198th street and at the northern terminus of the Williamsbridge car line on White Plains road, from each company, and use for passage on the other company's tracks or cars, a transfer slip for a continuous trip within said city of New York, except, however, that the said Westchester Electric Railroad Company has been and is now so operating a line of special cars called express cars between Bedford Park in the first district and New Rochelle in the second district, over the tracks and under franchises in said streets in the city of New York to and from the northerly line thereof, and upon said cars and over said line refuses to receive in said city of New York from passengers or issue to passengers said transfer slips for passenger transportation at the said designated transfer points upon said line.

And in further appearing, That the said regulations and practices of said Westchester Electric Railroad Company and said Union Railway Company as affecting the rates charged and collected for the transportation of persons within the first district are, as to passengers to and from said special cars, in said city of New York, unjust, unreasonable, unjustly discriminatory and unduly preferential and in violation of law and that it will be just and reasonable to require that the maximum fare and rate to be observed and enforced, as the amount to be charged for the service to be performed by said Union Railway Company and said Westchester Electric Railroad Company in the transportation of passengers in the first district, on said connecting lines of said companies, including the said Bedford Park and New Rochelle express cars, shall be fixed as hereinafter set forth.

Therefore, On motion of Abel E. Blackmar, Counsel for the Commission, it is

Ordered, As to the operation in the first district on Webster avenue, Olin avenue and White Plains road, in the city of New York, of the Bedford Park and New Rochelle express cars, as follows:

1. That the Westchester Electric Railroad Company shall, in the city of New York, issue to its passengers on said cars transfer slips for further transportation in a continuous trip in the said city upon the cars of the Union Railway Company at 198th street, Bedford Park, and at the terminus of the Williamsbridge car lines on White Plains road; that said Union Railway Company shall, at said places, accept from the said passengers said transfer slips for such further transportation in said city; that the said Union Railway Company shall, at the said places, issue to its passengers transfer slips for such further transportation in said city; that the said Union Railway Company shall, at the said place, issue to its passengers transfer slips for further transportation in a continuous trip in said city upon the said Bedford Park and New Rochelle express cars, and that said Westchester Electric Railroad Company shall, at said places, accept on said Bedford Park and New Rochelle express cars from said passengers such Union Railway transfer slips for the said further transportation in said city.

All in the same manner and to the same extent as said companies issue to and accept from each other transfer slips at said places in respect of any other car or line of cars and without discrimination against or preference to any.

2. That this order shall take effect the 31st day of October, 1907, and shall continue in force from and after the taking effect of same, so long as the operation of the said Bedford Park and New Rochelle cars shall be continued by said companies or either of them.

And it is further ordered, That within five days the said Union Railway Company of New York city and the said Westchester Electric Railroad Company notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

ORDER NO. 47.— ISSUED OCTOBER 25, 1907.

Ten day order on the complaint of F. A. Lippold *et al.* against Brooklyn Heights Railroad Company regarding failure to place station stop sign on Flatbush avenue, between Cortelyou road and Clarendon and Dorchester roads, Brooklyn. For form, see Form Note I, above.

ORDER NO. 48.— ISSUED OCTOBER 25, 1907.

Order against Brooklyn Heights Railroad Company and Brooklyn Union Elevated Railroad Company for hearing to inquire whether an official should be directed to be assigned on Brooklyn Bridge in responsible control of all operation by the companies on that structure. For form, see Form Note II, above.

ORDER NO. 49.— ISSUED OCTOBER 25, 1907.

Order against Brooklyn Union Elevated Railroad Company, on complaint of Robert E. Anthony as to trains upon gauntlets, Brooklyn Bridge.

In the Matter of The Hearing on the Motion of the Commission on the Question of the Adequacy and Safety of the Service and Equipment of the RICHMOND LIGHT AND RAILROAD COMPANY, in Respect to the FORT WADSWORTH CURVE. Under order made September 27, 1907.	ORDER NO. 50.— ISSUED OCTOBER 25, 1907.

This matter coming on upon the report of a hearing had herein on the 10th day of October, 1907, and it appearing that the said hearing was held by and pursuant to an order of this Commission made September 27th, and returnable on the 10th day of October, 1907, and that the said order was duly served upon the Richmond Light and Railroad Company, and that said service was by it duly acknowledged, and that the said hearing was held by and before this Commission on the matters in said order, specified on October 10, 1907, at which hearing proof was taken before Mr. Commissioner Bassett, presiding, and Arthur DuBois, Esq., appearing for the Commission, and Frank H. Innes, Esq., for the Richmond Light and Railroad Company.

And, It further appearing that at the close of the said hearing the Richmond Light and Railroad Company, by Frank H. Innes, its attorney, consented to an amendment of the order for hearing by the introduction and addition of the following clauses:

7th. Whether cars should come to a stop before entering this curve.

8th. Whether a direction sign covering speed or stopping should be placed at this point.

Now, It being made to appear by the proceedings upon the said hearing that the regulations, practices, equipment, appliances and service of the said Richmond Light and Railroad Company in respect to the transportation of persons at or near the corner of New York and Richmond avenues in Richmond county, in the first district, are unjust, unreasonable, unsafe, improper and inadequate, in that insufficient precaution is taken to prevent cars from rounding the said corner at an excessive and dangerous speed, and that in order to promote the security and convenience of the public and the employees of the said railroad company certain improvements and changes in and certain additions to the property and devices used by the Richmond Light and Railroad Company ought reasonably to be made:

Therefore, On motion of Abel E. Blackmar, Esq., Counsel to the Commission, it is

Ordered, That the following changes and improvements be made in the property, devices and services of the Richmond Light and Railroad Company at or near the corner of Richmond avenue and New York avenue, Richmond county, in the first district.

First, That the said Richmond Light and Railroad Company shall cause all cars operated by it, while proceeding towards St. George to come to a full stop before entering upon the curve formed by the intersection of Rich-

mond avenue and New York avenue, the place of stopping to be distant not more than thirty (30) feet south of the southerly end of the said curve.

Second, That the said Richmond Light and Railroad Company shall provide and conspicuously display at or near said curve which shall be plainly legible night and day to motormen operating cars bound for St. George and which shall clearly direct all motormen on cars bound for St. George to stop their cars before entering upon this curve.

And it is further ordered, That this order shall take effect on the 15th day of November, 1907.

And it is further ordered, That this order shall continue in force as long as the Richmond Light and Railroad Company shall continue to operate cars around the curve formed by the intersection of Richmond avenue with New York avenue, but without prejudice to an order for further or additional hearings or action thereon by the Commission in respect to anything herein prescribed while this order remains in force.

And it is further ordered, That before November 5, 1907, the said Richmond Light and Railroad Company notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

ORDER NO. 51.— ISSUED OCTOBER 25, 1907.

Ten day order on the complaint of J. D. Bowles against Nassau Electric Railroad Company regarding inadequate service and equipment on Fifth avenue surface line in Brooklyn. For form, see Form Note I, above.

In the Matter of Hearing on the Motion of the Commission on the Question of the Adequacy of the Service and Equipment of the NEW YORK CITY RAILWAY COMPANY, in Respect to the present Service on the Madison and Fourth Avenue Lines. Under order for hearing, made August 29, 1907.	ORDER NO. 52.— ISSUED OCTOBER 28, 1907.

This matter coming on upon the report of the hearing had herein on the 16th day of September, 1907, and it appearing that the said hearing was held by and pursuant to an order of this Commission made August 29, 1907, and returnable on the 16th day of September, 1907, and that the said order was duly served upon the New York City Railway Company and that the said service was by it duly acknowledged and that the said hearing was held by and before the Commission on the matters in said order specified on September 16, 1907, and by adjournment duly had, on September 26, 1907, and by adjournment duly had, on September 26, 1907, and by adjournment duly had, on October 9, 1907, and by adjournment duly had, on October 14, 1907, and by adjournment duly had, on October 16, 1907, and at all of

said sessions, Mr. Commissioner Maltbie, presiding, and proof being taken and Abel E. Blackmar, Esq., appearing for the Commission at all of said sessions, James L. Quackenbush, Esq., appearing for the New York City Railway Company at the sessions of September 16, September 23, September 26, and Daniel S. Patterson, Esq., appearing for the New York City Railway Company at the sessions of October 9, October 14, October 16; and it appearing that in an action in the Circuit Court of the United States for the southern district of New York, in equity, between the Pennsylvania Steel Company and the Degnon Contracting Company, as complainants, and the New York City Railway Company, as defendant, an order was duly entered appointing Adrian H. Joline and Douglas Robinson temporary receivers of the New York City Railway Company.

And it further appearing that on the 5th day of October, 1907, the said receivers were duly served with notice of continued hearing in this matter held at the office of the Commission on October 9, 1907, which said notice advised the said receivers of the matters upon which the hearing was had and extended to them an opportunity to attend, introduce testimony and examine and cross-examine witnesses.

And it further appearing that the said receivers elected not to attend at any of the hearings,

Now, it being made to appear by the proceedings upon the said hearing that the service of the New York City Railway Company in the transportation of persons in the first district on the Fourth avenue and Madison avenue line has been and is unreasonable, improper and inadequate, in that the said New York City Railway Company does not run cars enough on its Fourth avenue and Madison avenue line between 135th street and Ann street and between 135th street and Astor place reasonably to accommodate the traffic offered for transportation to it, and that it is reasonably necessary to accommodate and transport the passengers offering themselves for transportation, and is and will be just, reasonable and proper that the said service of the said New York City Railway Company on Fourth avenue and Madison avenue should be supplemented and changed in the particulars hereinafter set forth upon the lines, at the points and at the times so hereinafter set forth;

Therefore, On motion of Abel E. Blackmar, Esq., Counsel to the Commission, it is

Ordered, That the service of the New York City Railway Company on its Fourth and Madison avenue line be supplemented and changed as follows:

First, By running south from 135th street daily, except on Sunday, cars as follows:

Between 1 a. m. and 5 a. m. not less than six (6) cars per hour, to run at least as far south as Brooklyn bridge.

Between 5 a. m. and 9 a. m. not less than one hundred and twenty (120) cars, to run at least as far south as Astor place.

Between 9 a. m. and 5 p. m. not less than three hundred and sixty (360) cars, to run at least as far south as Astor place.

Between 5 p. m. and 9 p. m. not less than one hundred and twenty (120) cars, to run at least as far south as Astor place.

Between 9 p. m. and 1 a. m. not less than one hundred (100) cars, to run at least as far south at Astor place.

Second, By running in addition to the cars prescribed in paragraph "First," above, south from 116th street, daily except Sunday, cars as follows:

Between 5 a. m. and 9 a. m. not less than sixty (60) cars, to run at least as far south as Astor place.

Between 9 a. m. and 5 p. m. not less than forty (40) cars, to run at least as far south as Astor place.

Between 5 p. m. and 9 p. m. not less than forty (40) cars, to run at least as far south as Astor place.

Third, By running north from Brooklyn bridge at least as far north as 116th street, daily except Sunday, cars as follows:

Between 6 a. m. and 9 a. m. not less than ninety (90) cars.

Between 9 a. m. and 4:30 p. m. not less than two hundred and thirty (230) cars.

Between 4:30 p. m. and 9 p. m. not less than one hundred and ten (110) cars.

Between 9 p. m. and 1 a. m. not less than seventy cars.

Fourth, By running north from Astor place in addition to the cars prescribed in paragraph "Third," above, daily except Sunday, at least as far north as 116th street, cars as follows:

Between 5 p. m. and 9 p. m. not less than one hundred and forty (140) cars.

Between 9 p. m. and 1 a. m. not less than sixty (60) cars.

Fifth, By running on Sundays south from 135th street, cars as follows:

Between 1 a. m. and 5 a. m. not less than six (6) cars in each hour, to run as far south as Ann street.

Between 5 a. m. and 10 a. m. not less than one hundred (100) cars, to run at least as far south as Ann street.

Between 10 a. m. and 1 p. m. not less than one hundred and forty (140) cars, to run at least as far south as Astor place.

Between 1 p. m. and 7 p. m. not less than three hundred (300) cars, to run at least as far south as Astor place.

Between 7 p. m. and 1 a. m. not less than two hundred and forty (240) cars, to run at least as far south as Astor place.

Sixth, By running on Sundays, north from Ann street, cars as follows, to run at least as far north as 116th street:

Between 10 a. m. and 1 p. m. not less than ninety (90) cars.

Between 1 p. m. and 7 p. m. not less than two hundred (200) cars.

Between 7 p. m. and 1 a. m. not less than one hundred and eighty (180) cars.

Seventh. By running on Sundays, in addition to the cars prescribed in paragraph "Sixth," above, north from Astor place, at least as far north as 116th street, cars as follows:

Between 10 a. m. and 1 p. m. not less than sixty (60) cars.

Between 1 p. m. and 7 p. m. not less than one hundred and twenty (120) cars.

Between 7 p. m. and 1 a. m. not less than ninety (90) cars.

And it is further ordered, That this order shall take effect on November 1, 1907;

And it is further ordered, That this order shall continue in force for a period of two (2) years from and after the taking effect of the same but

without prejudice to an order for further or additional hearings and action thereon by the Commission in respect of anything herein prescribed prior to the expiration of said period of two (2) years.

And it is further ordered, That the provisions of this order shall apply to and be binding upon Adrian H. Joline and Douglas Robinson, as receivers of the New York City Railway Company, and shall apply to and be binding upon their successors in the same manner as the New York City Railway Company would be bound if the receivers were not in possession.

And it is further ordered, That before November 1, 1907, the New York City Railway Company and Adrian H. Joline and Douglas Robinson, as receivers of the New York City Railway Company, notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

In the Matter of The Filing with the PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT of Tariff Schedules by Railroad Corporations, in Pursuance of Section 28 of the Public Service Commissions Law.	ORDER No. 53.— ISSUED OCTOBER 28, 1907.

It is hereby ordered, That all railroad corporations which are engaged in the local transportation of persons or property within the first district of the State of New York, which includes the counties of New York, Kings, Queens and Richmond, shall make and file with this Commission at its office, number 154 Nassau street, in the city of New York, and keep open to public inspection, schedules showing the rates, fares and charges for the transportation of passengers and property within this State between each point upon its route within the first district and all other points thereon within the said first district; and between each point upon its route within the said first district and all points within that district upon every route leased, operated or controlled by it and between each point within the first district on its route or upon any route leased, controlled or operated by it and all points within the first district upon the route of every common carrier, whenever a through route and joint rate shall have been established or ordered between any two such points. Such schedules shall be dated November 1, 1907, and shall be entitled "Schedules made and filed by the (here insert the name of the company filing the same) pursuant to the requirements of section twenty-eight of the Public Service Commissions Law applicable to transportation between points within the first district," and shall apply to all subsequent traffic until modified as provided by law. Such schedules shall contain all information required by section twenty-eight of the Public Service Commissions Law. Until further ordered by this Commission they may be filed in any form from which shall exhibit plainly the information so required to be

given, provided, however, that the companies for whom a form of schedules has been prescribed by the Public Service Commission for the second district shall follow such form so far as the same is applicable. All schedules of rates, fares and regulations filed as hereby required, shall, however, be limited to those affecting the local transportation of passengers and property between the points hereinabove designated, and the rates, fares and regulations governing passenger traffic shall precede in order in said schedules the rates, fares and regulations governing the transportation of property.

It is further ordered, That this order shall take effect immediately, and that a certified copy of this order be served upon each railroad corporation affected thereby; and it is

Also further ordered, That every such corporation notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

In the Matter of The Filing with the PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT of Tariff Schedules by Express Companies, as Required by Section 28 of the Public Service Commissions Law.	ORDER NO. 54.— ISSUED OCTOBER 28, 1907.

It is hereby ordered, That each and every corporation, joint stock association, firm or individual doing an express business, any part of which is exclusively within the first district, that is to say, in the counties of New York, Kings, Queens, and Richmond, shall make and file with this Commission, at its office No. 154 Nassau street, in the borough of Manhattan, city of New York, and print and keep open to public inspection in the manner required by the Public Service Commissions Law, schedules showing the rates, fares and charges for the transportation of property between all points lying within the said first district.

The schedules shall, until further order of this Commission, be substantially in the following form:

They shall be entitled "Schedule made and filed by the (here insert the name of the company filing the same), pursuant to the requirements of section twenty-eight of the Public Service Commissions Law, showing the rates, charges and regulations applicable to express transportation between points within the first district."

Below such caption shall be printed a statement of the classes into which such property is divided, if the property is classified for the purpose of fixing the charges for transportation.

Next following shall be printed thereon any rules or regulations which may in anywise change, affect or determine any part of the aggregate of such rates or charges or the values of the service rendered.

Next thereunder shall be printed a schedule of the rates and charges as applied to each class of property, with a definite description of the territory containing the points to the transportation between which each separate rate is applicable.

The schedules shall be plainly printed in black ink on white paper and so arranged as to exhibit clearly the information hereinabove required.

Further ordered, That this order take effect immediately and that a certified copy of this order be served upon each express company affected thereby; and

It is further ordered, That every such company within five (5) days, notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

ORDER No. 55.— ISSUED OCTOBER 28, 1907.

Ten day order on the complaint of R. H. Nexsen against Brooklyn Heights Railroad Company regarding dangerous operation of cars on Flatbush avenue line in Brooklyn.

For form, see Form Note I, above.

ORDER No. 56.— ISSUED OCTOBER 28, 1907.

Ten day order on the complaint of Edward Connors against Brooklyn Union Elevated Railroad Company regarding inadequate service to points beyond Kensington in Brooklyn.

For form, see Form Note I, above.

ORDER No. 57.— ISSUED OCTOBER 30, 1907.

Order against Union Railway Company of New York City and Interborough Rapid Transit Company, upon the complaint of John E. Thompson and the answer of the company thereto.

For form, see Form Note III, above.

ORDER No. 58.— ISSUED OCTOBER 30, 1907.

Ten day order on the complaint of John E. Thompson against New York City Interborough Railway Company regarding discrimination in fares charged from Westchester to points within city.

For form, see Form Note I, above.

ORDER No. 59.— ISSUED OCTOBER 30, 1907.

Order against Interborough Rapid Transit Company upon the complaint of Grant Smith and the answer of the company thereto.

For form, see Form Note III, above.

In the Matter of The Order for Hearing Issued to the CONEY ISLAND AND BROOKLYN RAILROAD COMPANY, Regarding Improvement and Additional Equipment and Appliances.	ORDER No. 60.— ISSUED OCTOBER 30, 1907.

An order having been made herein on the 14th day of September, 1907, requiring the Coney Island and Brooklyn Railroad Company to supplement its equipment and appliances in a certain manner, and the same having been duly served on the said company on the 14th day of September, 1907, and said company having assented to all the items of said order, excepting as to item which required ten new combination cars, and as to that item the said company requested that the hearing be reopened in order that new testimony might be given; according to this request this hearing was thereupon reopened as to that item, and further testimony was taken on the 1st day of October, 1907, and the 21st day of October, 1907, by this Commission on the matters specified.

Mr. Commissioner Bassett, for the Commission, and Mr. Dykman, of Dykman & Kuhn, attended for and on behalf of the Coney Island and Brooklyn Railroad Company.

Now, it being made to appear by proceedings upon said hearing that the equipment and appliances of said Coney Island and Brooklyn Railroad Company are inadequate in the particulars hereinafter mentioned, and that it will be just, reasonable and proper that the equipment and appliances of the said Coney Island and Brooklyn Railroad Company should be supplemented in the particulars hereinafter set forth,

Therefore, On motion of Abel E. Blackmar, Counsel for the Commission, it is ordered as follows, to wit:

1. That the said Coney Island and Brooklyn Railroad Company provide ten new car bodies, with as great seating capacity as any that are now operated by said company, each with new double fifty-horse power equipments complete, and each with new trucks, for use on its Smith street line, on or before the 1st day of February, 1908.

And it is further ordered, That this order shall take effect at once, and shall continue in force until complied with in every particular, and that within five days of the service of this order, the said Coney Island and Brooklyn Railroad Company shall notify the Public Service Commission whether the terms of this order are accepted and will be obeyed.

In the Matter

of

The Complaint of JAMES C. SMITH against the UNION RAILWAY COMPANY OF NEW YORK CITY and WESTCHESTER ELECTRIC RAILROAD COMPANY.
Bedford Park and New Rochelle express line.

ORDER No. 62.— ISSUED NOVEMBER 1, 1907.

This matter coming on upon Order No. 46, entered and filed herein on the 25th day of October, 1907, it was, in lieu of the time prescribed therein for the taking effect of said order and for notification by the companies above named of acceptance of such order, as therein set forth, and application by said companies for extension,

Ordered as follows, to wit:

1. That said Order No. 46 shall take effect on the 6th day of November, 1907, and shall continue in force from and after the taking effect of the same for a period of twelve (12) months.

2. That within (5) days from and after October 31, 1907, the said Union Railway Company of New York city and the said Westchester Electric Railroad Company notify the Public Service Commission for the First District whether the terms of said Order No. 46 and of this order are accepted and will be obeyed.

In the Matter

of

The Complaint of JAMES C. SMITH against the UNION RAILWAY COMPANY OF NEW YORK CITY and WESTCHESTER ELECTRIC RAILROAD COMPANY.
Williamsbridge cars at 233d street.

ORDER No. 63.— ISSUED NOVEMBER 1, 1907.

This matter coming on upon Order No. 45, entered and filed herein on the 25th day of October, 1907, it was, in lieu of the time prescribed therein for the taking effect of said order and for notification by the companies above named of acceptance of such order, as therein set forth, and application by said companies for extension,

Ordered as follows, to wit:

1. That said Order No. 45 shall take effect on the 6th day of November, 1907, and shall continue in force from and after the taking effect of the same for a period of twelve (12) months.

2. That within five (5) days from and after October 31, 1907, the said Union Railway Company of New York city and the said Westchester Electric Railroad Company notify the Public Service Commission for the First District whether the terms of said Order No. 45 and of this order are accepted and will be obeyed.

ORDER No. 61.— ISSUED OCTOBER 30, 1907.

Ten day order on the complaint of Robert E. Anthony against Brooklyn Heights Railroad Company regarding improper use of "T" rail at the Avenue C and Brighton Beach division of Kings county elevated.

For form, see Form Note I, above.

ORDER No. 62½.— ISSUED NOVEMBER 1, 1907.

Ten day order on the complaint of Robert E. Anthony against Brooklyn Union Elevated Railroad Company regarding improper maintenance of structure at Sands street terminal of Brooklyn bridge.

For form, see Form Note I, above.

ORDER No. 63½.— ISSUED NOVEMBER 1, 1907.

Ten day order on the complaint of Robert E. Anthony against Brooklyn Union Elevated Railroad Company regarding condition of ties, guard-rail, etc., on Brooklyn bridge.

For form, see Form Note I, above.

ORDER No. 64 — ISSUED NOVEMBER 4, 1907.

Ten day order on the complaint of South Brooklyn Board of Trade against Coney Island and Brooklyn Railroad Company regarding imperfect equipment on Smith street line.

For form, see Form Note I, above.

ORDER No. 65.— ISSUED NOVEMBER 4, 1907.

Ten day order on the complaint of Frank Bennett against Brooklyn Union Elevated Railroad Company regarding overloaded condition of cars on Lexington avenue and Ridgewood lines.

For form, see Form Note I, above.

ORDER No. 66.— ISSUED NOVEMBER 4, 1907.

Order against Brooklyn Union Elevated Railroad Company to inquire whether terminal facilities at Cypress Hills station were adequate, and if found not so to be to determine what changes and improvements should be required therein.

For form, see Form Note II, above.

ORDER No. 67.— ISSUED NOVEMBER 6, 1907.

Ten day order on the complaint of John H. MacCracken against New York City Interborough Railway Company regarding lack of waiting room facilities at One Hundred and Eighty-first street subway terminal, and objectionable rule regarding minimum speed for cars crossing Washington bridge.

For form, see Form Note I, above.

ORDER No. 68.— ISSUED NOVEMBER 6, 1907.

Order against Brooklyn Union Elevated Railroad Company, on complaint of Frank Bennett as to transfers at Cypress Hills station.

ORDER No. 69.— ISSUED NOVEMBER 6, 1907.

Ten day order on the complaint of Theodore F. Seward against Brooklyn Heights Railroad Company regarding careless operation of surface cars at Manhattan terminal of Brooklyn bridge.

For form, see Form Note I, above.

ORDER No. 70.— ISSUED NOVEMBER 6, 1907.

Ten day order on the complaint of Robert E. Anthony against Brooklyn Heights Railroad Company regarding failure of trolley wire to follow curvature of track on south roadway of Brooklyn bridge, Manhattan terminal.

For form, see Form Note I, above.

In the Matter of The Hearing on the Motion of the Commission on the Question of the Service of the BROOKLYN RAPID TRANSIT COMPANY, BROOKLYN HEIGHTS RAILROAD COMPANY, BROOKLYN, QUEENS COUNTY AND SUBURBAN RAILROAD COMPANY, THE NASSAU ELECTRIC RAILROAD COMPANY, THE CONEY ISLAND AND GRAVESEND RAILWAY COMPANY, and THE AMERICAN RAILWAY TRAFFIC COMPANY, as to the Removal and Final Disposition of Ashes in the County of Kings, State of New York.	ORDER No. 71.— ISSUED NOVEMBER 4, 1907.

Orders for hearing having been made herein on the 29th and 30th days of August, 1907, to inquire whether the regulations, practices and service of the above named corporations in respect to the transportation of cars for the reception and removal of ashes in the county of Kings, are unjust, unreasonable and improper, and if so found to be, to determine whether it would be just, reasonable and proper to require the said corporations to cease and desist from moving over any of their lines operated or controlled by them in the county of Kings, State of New York, cars provided or used for the removal of ashes or other waste material, during the hours between 6 o'clock in the forenoon and 8 o'clock at night, and the said orders having been duly served upon the said above named corporations, and the said matter coming on to be heard before the Commission on the 17th day of September, 1907, and the said corporations having appeared by George D. Yeomans, Esq., their counsel, and the

said Commission appearing by Abel E. Blackmar, its counsel, and testimony having been taken and witnesses having been examined at the said date and at adjourned days, and the Commission having duly considered the matter,

Now, on motion of Abel E. Blackmar, Counsel for the Commission, and it appearing to the said Commission that the regulations, practices and service of the above named corporations in respect to the transportation of cars for the reception and removal of ashes in the county of Kings are not under the circumstances disclosed by such evidence at present unjust, unreasonable or improper, it is

Ordered, That the said proceedings be dismissed without prejudice to further action by the said Commission in the premises, if it should be made hereafter at any time to appear that such regulations, practices and service in respect to the matters hereinabove mentioned, are unjust, unreasonable and improper.

ORDER No. 72.— ISSUED NOVEMBER 8, 1907.

Ten day order on the complaint of William F. Moore against Brooklyn, Queens County and Suburban Railroad Company regarding dangerous switch at Cypress Hills station.

For form, see Form Note I, above.

ORDER No. 73.— ISSUED NOVEMBER 8, 1907.

Ten day order on the complaint of Frank Bennett against Brooklyn Heights Railroad Company regarding condition of "gypsy" pit at Manhattan terminal of Brooklyn bridge.

For form, see Form Note I, above.

ORDER No. 74.— ISSUED NOVEMBER 8, 1907.

Ten day order on the complaint of Robert E. Anthony against Brooklyn Heights Railroad Company regarding imperfect equipment of cars used on Brooklyn bridge.

For form, see Form Note I, above.

ORDER No. 75.— ISSUED NOVEMBER 8, 1907.

Order against Richmond Light and Railroad Company to inquire whether service and equipment was proper and adequate, and if found not so to be to determine what increase and improvements should be required therein.

For form, see Form Note II, above.

ORDER No. 76.— ISSUED NOVEMBER 8, 1907.

Order against Staten Island Midland Railway Company for hearing to inquire whether service and equipment was reasonable and adequate, and if found not so to be to determine what changes and improvements should be required.

For form, see Form Note II, above.

ORDER No. 77.— ISSUED NOVEMBER 8, 1907.

Order against Staten Island Railway Company for hearing to inquire whether service and equipment was reasonable and adequate, and if not found

so to be to determine what, if any, changes and improvements should be required therein.

For form, see Form Note II, above.

ORDER No. 78.— ISSUED NOVEMBER 8, 1907.

Order against Staten Island Rapid Transit Railway Company for hearing to inquire whether service and equipment was reasonable and adequate, and if not found so to be, to determine what changes and improvements should be required therein.

For form, see Form Note II, above.

ORDER No. 79.— ISSUED NOVEMBER 11, 1907.

Ten day order on the complaint of Robert E. Anthony against Brooklyn Heights Railroad Company regarding improper system of signalling at Manhattan terminal of Brooklyn bridge.

For form, see Form Note I, above.

ORDER No. 80.— ISSUED NOVEMBER 11, 1907.

Ten day order on the complaint of Robert E. Anthony against Brooklyn Heights Railroad Company regarding too long headway on Brooklyn bridge between 6.30 p. m. and 6.50 p. m.

For form, see Form Note I, above.

ORDER No. 81.— ISSUED NOVEMBER 11, 1907.

Ten day order on the complaint of Robert E. Anthony against Brooklyn Heights Railroad Company regarding the failure to make proper use of stairway facilities on Brooklyn bridge elevated platform.

For form, see Form Note I, above.

ORDER No. 82.— ISSUED NOVEMBER 18, 1907.

Ten day order on the complaint of Rev. Otto Graesser against New York City Railway Company regarding inadequate service on Eighth street crosstown line.

For form, see Form Note I, above.

ORDER No. 83.— ISSUED NOVEMBER 18, 1907.

Ten day order on the complaint of Rev. Otto Graesser against New York City Railway Company regarding inadequate service on Avenue B line.

For form, see Form Note I, above.

ORDER No. 84.— ISSUED NOVEMBER 13, 1907.

Ten day order on the complaint of Rev. Otto Graesser against Interborough Rapid Transit Company regarding lack of through service to Bronx on Second avenue elevated.

For form, see Form Note I, above.

ORDER No. 85.— ISSUED NOVEMBER 13, 1907.

Ten day order on the complaint of Robert E. Anthony against Brooklyn Heights Railroad Company regarding improper operation of gates on trolley cars at Manhattan terminal of Brooklyn bridge.

For form, see Form Note I, above.

ORDER No. 86.— ISSUED NOVEMBER 13, 1907.

Ten day order on the complaint of Robert E. Anthony against Brooklyn Heights Railroad Company regarding improper operation of trains immediately after change from bridge local service to through service from Manhattan end of Brooklyn bridge.

For form, see Form Note I, above.

ORDER No. 87.— ISSUED NOVEMBER 13, 1907.

Order against Brooklyn Union Elevated Railroad Company for hearing to inquire whether regulations, appliances and service on Ridgewood-Lutheran cemetery line were reasonable, proper and adequate, and if found not so to be to determine what changes and improvements should be required therein.

For form, see Form Note II, above.

ORDER No. 88.— ISSUED NOVEMBER 13, 1907.

Order against Coney Island and Brooklyn Railroad Company to inquire whether its equipment was reasonable and adequate, and if not found so to be to determine what changes and improvements should be required therein.

For form, see Form Note II, above.

ORDER No. 89.— ISSUED NOVEMBER 13, 1907.

Order against Brooklyn Union Elevated Railroad Company for hearing to inquire whether regulations, practices, appliances and service of company were reasonable and adequate, and if not found so to be to determine what, if any, changes should be required therein.

For form, see Form Note II, above.

ORDER No. 90.— ISSUED NOVEMBER 15, 1907.

Ten day order on the complaint of Nathaniel M. Brown against Nassau Electric Railroad Company regarding inadequate service offered residents of Windsor terrace and vicinity, Brooklyn.

For form, see Form Note I, above.

ORDER No. 91.— ISSUED NOVEMBER 15, 1907.

Ten day order on the complaint of Essen & Craiger against New York City Railway Company regarding imperfect equipment on Sixth avenue surface line in Manhattan.

For form, see Form Note I, above.

ORDER No. 92.— ISSUED NOVEMBER 15, 1907.

Ten day order on the complaint of G. J. Turnbull against New York City Railway Company regarding "car behind" nuisance and improper service on Broadway line in Manhattan.

For form, see Form Note I, above.

ORDER No. 93.— ISSUED NOVEMBER 15, 1907.

Ten day order on the complaint of F. W. Saward against New York City Railway Company regarding failure to operate for passengers, route covering Madison avenue and part of One Hundred and Twenty-fifth street and Lenox avenue in Manhattan.

For form, see Form Note I, above.

ORDER No. 94.— ISSUED NOVEMBER 15, 1907.

Ten day order on the complaint of F. W. Saward against Union Railway of New York City regarding improper designation of route by signs on cars of One Hundred and Thirty-fifth street line in the Bronx.

For form, see Form Note I, above.

ORDER No. 95.— ISSUED NOVEMBER 15, 1907.

Ten day order on the complaint of C. F. Mathison against Brooklyn Union Elevated Railroad Company regarding dangerous condition of platform at Thirty-sixth street and Fifth avenue, Brooklyn.

For form, see Form Note I, above.

ORDER No. 96.— ISSUED NOVEMBER 15, 1907.

Ten day order on the complaint of Thomas Ward against New York Central and Hudson River Railroad Company regarding blocking of crossing at Twelfth avenue and West Seventy-ninth street.

For form, see Form Note I, above.

ORDER No. 97.— ISSUED NOVEMBER 18, 1907.

Ten day order on the complaint of Patrick Mellon against Nassau Electric Railroad Company regarding inadequate service on Bergen street line in Brooklyn.

For form, see Form Note I, above.

ORDER No. 98.— ISSUED NOVEMBER 18, 1907.

Ten day order on the complaint of F. Van Z. Lane against Coney Island and Brooklyn Railroad Company regarding lack of destination signs on Smith street cars crossing Brooklyn bridge.

For form, see Form Note I, above.

In the Matter

of

The Hearing on the Motion of the Commission on the Question of the Adequacy of the Service of the BROOKLYN HEIGHTS RAILROAD COMPANY and the BROOKLYN UNION ELEVATED RAILROAD COMPANY, in Respect to the Present Service on the Jamaica Avenue Line of said BROOKLYN HEIGHTS RAILROAD COMPANY, and on the Lexington Avenue Line of the said BROOKLYN UNION ELEVATED RAILROAD COMPANY.

Under order for hearing made October 11, 1907.

ORDER No. 99.— ISSUED NOVEMBER 18, 1907.

This matter coming on upon the report of the hearing had herein on the 23d day of October, 1907, and it appearing that the said hearing was held by and pursuant to an order of this Commission made October 11, 1907, and returnable on the 23d day of October, 1907, and that the said order was duly served upon the Brooklyn Heights Railroad Company, and that the said company, and that the said service was by it duly acknowledged, and that the said hearing was held by and before the Commission on the matters in said order specified, on October 23, 1907, and by adjournment duly had on October 30, 1907, and by adjournment duly had on November 6, 1907, and at all of said sessions Mr. Commissioner Bassett, presiding, and proof being taken, and Grosvenor H. Backus, Esq., assistant counsel, appearing for the Commission at all of said sessions, and Arthur N. Dutton, Esq., appearing for the Brooklyn Heights Railroad Company at all of the said sessions, and the Brooklyn Union Elevated Company having also voluntarily appeared on the said hearing as if named in the said order of the Commission for said hearing, by Arthur N. Dutton, Esq., its assistant general manager, and having consented to be subject thereto,

Now, it being made to appear by the proceedings upon the said hearing that the service of the Brooklyn Union Elevated Railroad Company in the transportation of persons in the first district, on its lines operating on Lexington avenue, Broadway, Fulton street and Crescent street, in the borough of Brooklyn, has been and is unreasonable, improper and inadequate in that the said company does not run enough cars on its Lexington avenue line between Brooklyn bridge and Manhattan junction during the evening rush hours, and does not run enough cars through to Cypress Hills station reasonably to accommodate traffic offered for transportation to said company, and that it is reasonably necessary for the accommodation and transportation of the passengers offering themselves for transportation, and is and will be just, reasonable and proper that the said service of the said Brooklyn Union Elevated Railroad Company on said lines should be supplemented and changed

in the particulars hereinafter set forth, upon the lines, at the points and at the times so hereinafter set forth;

And, it being made to appear that the service of the Brooklyn Heights Railroad Company in the transportation of persons in the first district, on its Jamaica avenue line, is unreasonable, improper and inadequate, in that the said Brooklyn Heights Railroad Company does not run cars enough on its Jamaica avenue line between Cypress Hills station and Jamaica, reasonably to accommodate traffic offered for transportation to it, and that it is reasonably necessary for the transportation of passengers offering themselves for transportation, and is and will be just, reasonable and proper that the said service of the said Brooklyn Heights Railroad Company on Jamaica avenue should be supplemented and changed in the particulars hereinafter set forth, at the points and at the times so hereinafter set forth;

Therefore, on motion of Abel E. Blackmar, Esq., Counsel to the Commission, it is

Ordered, That the service of the Brooklyn Union Elevated Railroad Company, on its lines on Lexington avenue, Broadway, Fulton street and Crescent street, be supplemented and changed as follows:

1. That the said Brooklyn Union Elevated Railroad Company operate the short line trains of its Lexington avenue line, which have heretofore terminated their eastward run at Gates avenue, through to Manhattan junction, during the evening rush hours, and that the said company make each of such trains during said rush hours a train of at least six (6) cars.

2. That the said company operate all trains on its Broadway line, which have heretofore terminated their eastward run at Van Siclen avenue, through to Cypress Hills station at all times, and that during the rush hours, both morning and evening, the said company make each of said trains a train of at least five (5) cars.

3. That the said company operate its Lexington avenue trains to and from Cypress Hills station with a headway of not more than seven and one-half (7½) minutes between said trains, during the period between the morning and the evening rush hours, and during the period after the evening rush hours until 12 o'clock midnight, and that during those periods the said company make each of said trains a train of not less than four (4) cars;

And it is further ordered, That the Brooklyn Heights Railroad Company supplement and change its service on its Jamaica avenue line between the Cypress Hills station and Jamaica, as follows:

1. That the said company increase its service on its Jamaica avenue line so that at least twenty per cent. (20%) more cars shall operate between Cypress Hills station and Jamaica than were provided in the schedule in effect on said line on the 11th day of October, 1907.

2. That in addition to the said increase the said company run an additional car out from Jamaica to Cypress Hills at 4.45 a. m., so that cars shall leave Jamaica with a headway of not more than fifteen (15) minutes between cars during the period between 4.30 a. m. and 5 a. m., inclusive.

And it is further ordered, That this order shall take effect on the 27th day of November, 1907.

And it is further ordered, That this order shall continue in force for a period of one year from and after the date when the same takes effect, but without prejudice to an order for further or additional hearings and action

thereon by the Commission in respect of anything herein prescribed, prior to the expiration of said period of one year.

And it is further ordered, That before the 25th day of November, 1907, the Brooklyn Union Elevated Railroad Company and the Brooklyn Heights Railroad Company each notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

ORDER No. 100.— ISSUED NOVEMBER 20, 1907.

Order against Long Island Railroad Company to inquire whether operation of local service between East New York and Long Island City should be required to be resumed, and whether additional trains between said points should be required to be run.

For form, see Form Note II, above.

ORDER No. 101.— ISSUED NOVEMBER 20, 1907.

Order against New York City Interborough Railway Company for hearing upon the complaint of John H. MacCracken and the answer of the company thereto.

For form, see Form Note III, above.

ORDER No. 102.— ISSUED NOVEMBER 20, 1907.

Ten day order on the complaint of Walter E. Parfitt against Brooklyn Heights Railroad Company and Brooklyn Union Elevated Railroad Company regarding lack of proper destination signs on elevated and surface cars in Brooklyn.

For form, see Form Note I, above.

ORDER No. 103.— ISSUED NOVEMBER 20, 1907.

Ten day order on the complaint of Robert E. Anthony against Brooklyn Heights Railroad Company, regarding defect in construction of overhead trolley wire at southeast corner of station building, at Manhattan terminal of Brooklyn bridge.

For form, see Form Note I, above.

ORDER No. 104.— ISSUED NOVEMBER 20, 1907.

Order against Coney Island and Brooklyn Railway Company for hearing upon complaint of South Brooklyn Board of Trade against Coney Island and Brooklyn Railroad Company and answer of company thereto.

For form, see Form Note III, above.

ORDER No. 105.— ISSUED NOVEMBER 22, 1907.

Ten day order on the complaint of Michael O'Sullivan against Coney Island and Brooklyn Railroad Company, regarding exaction of two fares, 10 cents, for continuous trip between Church avenue and Avenue S, on Coney Island avenue line in Brooklyn.

For form, see Form Note I, above.

ORDER NO. 106 — ISSUED NOVEMBER 22, 1907.

Ten day order on the complaint of Robert E. Anthony against Brooklyn Heights Railroad Company, regarding failure to properly sand rails on Manhattan approach of Brooklyn bridge.

For form, see Form Note I, about.

In the Matter

of

The Hearing on the Motion of the Commission on the Question of the Adequacy of the Service and Equipment of the UNION RAILWAY COMPANY OF NEW YORK CITY. Under order for hearing issued September 13, 1907.

ORDER NO. 107.— ISSUED NOVEMBER 22, 1907.

This matter coming on upon the report of the hearing had herein on September 27, 1907, October 4, 1907, October 11, 1907 and October 15, 1907, and it appearing that the said hearings was held by and pursuant to an order of this Commission made September 13, 1907, and that the said order was duly served upon the Union Railway Company of New York City, and that the said service was by the said company duly acknowledged, and that the said hearing was held by and before the Commission on the matters in said order specified on September 27, 1907, October 4, 1907, October 11, 1907 and October 15, 1907, pursuant to adjournments duly had, and at all of the said sessions Mr. Commissioner Eustis, presiding, Oliver C. Semple, Esq., assistant counsel, appearing for the Commission, and Edward A. Maher, Esq., president, and Ambrose T. McCabe, Esq., attorney, appearing for the said Union Railway Company of New York City.

Now, it being made to appear by the proceedings upon the said hearing that the service of the said Union Railway Company of New York City in the transportation of persons in the first district on the lines of said company hereinafter mentioned, has been and is unreasonable, improper, and inadequate, in that the said Union Railway Company of New York City does not run cars enough on said lines reasonably to accommodate the traffic offered for transportation to it, and that it is reasonably necessary to accommodate and transport the passengers offering themselves for transportation, and is and will be just, reasonable and proper that the said service of the said Union Railway Company of New York City on said lines should be supplemented and changed in the particulars hereinafter set forth, at the points and at the times so hereinafter mentioned.

Therefore, on motion of Abel E. Blackmar, Esq., Counsel to the Commission, it is

Ordered, That the service of the said Union Railway Company of New York City on the lines of said company hereinafter mentioned respectively, be supplemented and changed as follows, to wit:

1. By running south on the Jerome avenue line, on its prescribed route between One Hundred and Fifty-fifth street viaduct, via Macomb's dam bridge, Jerome avenue, Central avenue and Yonkers, between 6.20 and 9 o'clock in the morning, sixty (60) cars.

2. By running north on the said Jerome avenue line, on the route aforesaid, between 4 o'clock and 6 o'clock in the afternoon, fifty-two (52) cars.

3. By running on the Mount Vernon line, on the prescribed route between One Hundred and Ninety-eighth street, by way of Webster avenue, Olin avenue, White Plains road and Mount Vernon, south bound, between 6.30 o'clock and 9 o'clock in the morning, forty-three (43) cars.

4. By running north bound on the said Mount Vernon line, on the route aforesaid, between 6.30 o'clock and 9 o'clock in the morning, forty-three (43) cars.

5. By running on the West Mount Vernon line, on the route prescribed between One Hundred and Ninety-eighth street, by way of Webster avenue, Bronx river road and West Mount Vernon, south bound, between 6.30 o'clock and 9 o'clock in the morning, twenty (20) cars.

6. By running north on the said West Mount Vernon line, on the route aforesaid, between 4.40 o'clock and 7 o'clock in the afternoon, twenty (20) cars.

7. By running on the One Hundred and Thirty-eighth street line, on the route prescribed, between One Hundred and Thirty-fifth street at Eighth avenue, by way of One Hundred and Thirty-fifth street, One Hundred and Thirty-eighth street and Port Morris, between 6.30 o'clock and 9 o'clock in the morning and between 5 o'clock and 6.30 o'clock in the afternoon, at least thirty (30) cars in each hour thereof, and at the same rate for each fraction of an hour, and upon an even maintained headway or interval of two minutes between such cars.

8. By running on the said One Hundred and Thirty-eight street line, on the route aforesaid, between 9 o'clock in the morning and 5 o'clock in the afternoon, eighteen (18) cars in each hour thereof, and at the same rate for each fraction of an hour, upon an even maintained headway of three minutes and twenty seconds between such cars.

9. By running between 5 o'clock in the morning and 8 o'clock in the evening one-half of all cars on the Boston avenue or West Farms line, on the route prescribed between One Hundred and Twenty-eighth street by Third avenue, Boston road and West Farms, beyond West Farms, through Morris Park avenue, to the Morris Park race course, upon a headway or interval between said cars from said race course terminal of eight minutes between 5 o'clock in the forenoon and 4.30 o'clock in the afternoon, and of six minutes between 3.30 o'clock and 6.30 o'clock in the afternoon.

And it is further ordered, That this order shall take effect as to items above mentioned numbered "1," "2," "3," "4," "5," "6," "7" and "8" on the expiration of two days from and after the service of this order, and as to item numbered "9" above mentioned, that this order shall take effect on the 10th day of December, 1907.

And it is further ordered, That this order shall continue in force for a period of twelve months from and after the taking effect of the same, but without prejudice to an order for further or additional hearings and action

thereon by the Commission in respect of anything herein prescribed prior to the expiration of said period.

And it is further ordered, That within five days from and after the service of this order, the said Union Railway Company of New York City notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

ORDER No. 108.— ISSUED NOVEMBER 25, 1907.

Order against Brooklyn Union Elevated Railroad Company for hearing upon complaint of Robert E. Anthony and answer of company thereto.

For form, see Form Note III, above.

ORDER No. 109.— ISSUED NOVEMBER 27, 1907.

Ten day order on the complaint of Robert Spitzer against Brooklyn Heights Railroad Company, regarding improper location of transfer point at Nostrand avenue and Malbone street, Brooklyn.

For form, see Form Note I, above.

ORDER No. 110.— ISSUED NOVEMBER 27, 1907.

Ten day order on the complaint of Jared J. Chambers against Brooklyn Union Elevated Railroad Company, regarding inadequate stairway facilities at Gates avenue and Broadway elevated station in Brooklyn.

For form, see Form Note I, above.

ORDER No. 111.— ISSUED NOVEMBER 27, 1907.

Order against Interborough Rapid Transit Company to inquire whether service on express and local tracks in subway was reasonable and adequate, and if not found so to be to determine what increases, changes and improvements therein should be required.

For form, see Form Note II, above.

GRANT SMITH, Complainant,

against

INTERBOROUGH RAPID TRANSIT COMPANY, Defendant.

Under order for hearing issued October 30, 1907, No. 59.

ORDER No. 112.— ISSUED NOVEMBER 27, 1907.

This matter coming on upon the report of the hearing had herein on November 12, 1907, November 19, 1907, and November 23, 1907, and it appearing that the said hearing was held by and pursuant to an order of this Commission made October 30, 1907, upon the complaint and answer herein, and that the said order was duly served upon the said Interborough Rapid Transit Company and that the said service was by the said company duly acknowledged, and that the said hearing was held by and before the Com-

mission on the matters in said complaint, answer and order specified on November 12, 1907, November 19, 1907, and November 23, 1907, and at all of said sessions Mr. Commissioner Eustis, presiding, Oliver C. Semple, Esq., assistant counsel, appearing for the Commission, and Alfred A. Gardner, Esq., as attorney appearing for said Interborough Rapid Transit Company;

Now, It appearing by said complaint that employees of defendant in and about the operation of switches upon some of its elevated roads are alleged to be employed in excess of the hours prescribed by chapter 627 of the Laws of 1907, and in violation of said act, and by the answer herein and the evidence produced upon said hearing it appearing that the acts of the defendant complained of are not in violation of said act, it is

On motion of Abel E. Blackmar, Esq., Counsel to the Commission,

Ordered, That the said complaint be and the same hereby is dismissed, and that this order be filed in the office of the Commission.

ORDER No. 113.— ISSUED NOVEMBER 27, 1907.

Ten day order on the complaint of Thomas J. Shine and 128 others against New York City Interborough Railway Company regarding change in route and running time of cars.

For form, see Form Note I, above.

ORDER No. 114.— ISSUED NOVEMBER 27, 1907.

Order against New York City Railway Company and receivers of said company for hearing to inquire whether service on Eighth avenue line was reasonable and adequate, and if not found so to be to determine what increases, changes and improvements should be required therein.

For form, see Form Note II, above.

ORDER No. 115.— ISSUED NOVEMBER 27, 1907.

Ten day order on the complaint of John Davis against Union Railway Company regarding refusal to accept on Jerome avenue car, bound north, transfer from east bound car.

For form, see Form Note I, above.

ORDER No. 116.— ISSUED NOVEMBER 27, 1907.

Ten day order on the complaint of John Davis against Interborough Rapid Transit Company regarding lack of service by which residents of the Bronx can reach points south of Chatham square by Second or Third avenue elevated.

For form, see Form Note I, above.

ORDER No. 117.— ISSUED NOVEMBER 29, 1907.

Ten day order on the complaint of Bird S. Coler, president of the borough of Brooklyn, against Nassau Electric Railroad Company and Brooklyn, Queens County and Suburban Railroad Company regarding improper maintenance of streets in which companies have tracks.

For form, see Form Note I, above.

ORDER No. 118.— ISSUED NOVEMBER 29, 1907.

Ten day order on the complaint of Bird S. Coler, president of the borough of Brooklyn, against Nassau Electric Railroad Company regarding improper maintenance of streets in which the company has tracks.

For form, see Form Note I, above.

ORDER No. 119.— ISSUED NOVEMBER 29, 1907.

Ten day order on the complaint of Bird S. Coler, president of the borough of Brooklyn, against Brooklyn City Railroad Company, Brooklyn Heights Railroad Company, Brooklyn, Queens County and Suburban Railroad Company regarding improper maintenance of streets in which companies have tracks.

For form, see Form Note I, above.

ORDER No. 120.— ISSUED NOVEMBER 21, 1907.

Ten day order on the complaint of Bird S. Coler, president of the borough of Brooklyn, against Brooklyn City Railroad Company and Brooklyn Heights Railroad Company regarding improper maintenance of streets in which companies have tracks.

For form, see Form Note I, above.

ORDER No. 121.— ISSUED DECEMBER 2, 1907.

Order against Interborough Rapid Transit Company for hearing to inquire whether company should be required to equip local tracks of subway with block signal system.

For form, see Form Note II, above.

ORDER No. 122.— ISSUED DECEMBER 2, 1907.

Ten day order on the complaint of Robert E. Anthony against Brooklyn Union Elevated Railroad Company regarding failure to make proper use of stairway facilities at Sands street terminal of Brooklyn bridge.

For form, see Form Note I, above.

ORDER No. 123.— ISSUED DECEMBER 2, 1907.

Ten day order on the complaint of George A. Denholm and W. M. Clark against Union Railway Company regarding inadequate service on Jerome avenue in Bronx.

For form, see Form Note I, above.

ORDER No. 124.— ISSUED DECEMBER 4, 1907.

Ten day order on complaint of Frank Bennett against South Brooklyn Railway Company regarding dangerous condition of station platforms along Culver line.

For form, see Form Note I, above.

ORDER No. 125.— ISSUED DECEMBER 4, 1907.

Ten day order on the complaint of Whidden Graham against Interborough Rapid Transit Company regarding inadequate service on Third avenue South Ferry line.

For form, see Form Note I, above.

ORDER No. 126.—ISSUED DECEMBER 4, 1907.

Ten day order on the complaint of F. W. Saward against receivers of the New York City Railway Company regarding failure to operate for passengers, route covering Madison avenue and part of One Hundred and Thirty-fifth street and Lenox avenue.

For form, see Form Note I, above.

ORDER No. 127.— ISSUED DECEMBER 4, 1907.

Ten day order on the complaint of G. J. Turnbull against receivers of New York City Railway Company regarding "car behind" nuisance and inadequate service on Broadway line.

For form, see Form Note I, above.

ORDER No. 128.— ISSUED DECEMBER 4, 1907.

Ten day order on the complaint of S. M. Craiger against receivers of the New York City Railway Company regarding the equipment of Sixth avenue surface line.

For form, see Form Note I, above.

ORDER No. 129.— ISSUED DECEMBER 4, 1907.

Ten day order on the complaint of Rev. Otto Graesser against receivers of New York City Railway Company regarding inadequate service on Avenue B line.

For form, see Form Note I, above.

ORDER No. 130.— ISSUED DECEMBER 4, 1907.

Ten day order on the complaint of Rev. Otto Graesser against receivers of New York City Railway Company regarding inadequate service on Eighth avenue crosstown line.

For form, see Form Note I, above.

ORDER No. 131.— ISSUED DECEMBER 4, 1907.

Ten day order on the complaint of Robert E. Anthony against Coney Island and Brooklyn Railroad Company regarding improper condition of rails, cross-overs, etc., at various points.

For form, see Form Note I, above.

ORDER No. 132.— ISSUED DECEMBER 4, 1907.

Ten day order on the complaint of Geo. W. Bartholf against New York and Queens County Railway Company regarding failure to run through cars between Jamaica and Long Island City by way of Flushing, and too long headway.

For form, see Form Note I, above.

ORDER No. 133.— ISSUED DECEMBER 4, 1907.

Order against New York Central and Hudson River Railroad Company on complaint of E. D. Hutchinson as to cross-over switch at One Hundred and Thirty-first street.

In the Matter of The Hearing on the Motion of the Commission on the Question of Improvement in and Addition to the Equipment of the CONEY ISLAND AND BROOKLYN RAILROAD COMPANY. Under order for hearing made November 13, 1907.	ORDER No. 134.— ISSUED DECEMBER 4, 1907.

This matter coming on upon the report of the hearing had herein on the 25th day of November, 1907, and it appearing that the said hearing was held by and pursuant to an order of this Commission made November 13, 1907, and that the said order was duly served upon the Coney Island and Brooklyn Railroad Company, and that the said service was by it duly acknowledged, and that the said hearing was held by and before the Commission on the matters in said order specified on November 25, 1907, Mr. Commissioner Bassett, presiding at said hearing, and proof being taken, and Grosvenor H. Backus, Esq., assistant counsel, appearing for the Commission, and no one appearing for the Coney Island and Brooklyn Railroad Company,

Now, It being made to appear by the proceedings upon the said hearing that the regulation, equipment and appliances of the Coney Island and Brooklyn Railroad Company, in respect to the transportation of persons in the first district are unsafe, improper and inadequate, and that changes, improvements and additions thereto ought reasonably to be made in the manner below set forth in order to promote the security and convenience of the public and in order to secure adequate service and facilities for the transportation of passengers, and it being made to appear by said proceedings that the changes, additions and improvement of regulations, equipment and appliances of said company as hereinafter set forth are such as would be just, reasonable, safe and proper and ought reasonably to be made in order to promote the security and convenience of the public and to secure adequate facilities for the transportation of passengers, and that such changes, additions and improvement ought reasonably to be made by or before the 15th day of April, 1908,

Therefore, On motion of Abel E. Blackmar, Esq, Counsel to the Commission, it is

Ordered, 1. That the said Coney Island and Brooklyn Railroad Company pass all the open cars now owned by said company through the shops and make every necessary repair to the car bodies, trucks and equipment of said cars, and turn them out in as perfect condition as possible by or before the 15th day of April, 1908.

2. That said company, by or before the said 15th day of April, 1908, provide and equip all of said open cars with two (2) new automatic circuit breakers of sufficient capacity and modern type.

3. That said company, by or before the said 15th day of April, 1908, provide and equip each of said cars with a gear case for each motor on each of said cars.

And it is further ordered, That this order shall take effect immediately.

And it is further ordered, That before the 16th day of December, 1907, the said Coney Island and Brooklyn Railroad Company shall notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

ORDER No. 135.— ISSUED DECEMBER 6, 1907.

Order against Interborough Rapid Transit Company for hearing to inquire whether service on Ninth avenue elevated line was reasonable and adequate, and if not found so to be, to determine what increases, changes and improvements should be required therein.

For form, see Form Note II, above.

ORDER No. 136.— ISSUED DECEMBER 6, 1907.

Resolved, First, That every railroad corporation, street railroad corporation, common carrier and every stock corporation holding any shares of the capital stock of any railroad corporation, street railroad corporation or common carrier, be and they hereby are severally required to file with the secretary of the Public Service Commission for the First District, at its office, No. 154 Nassau street, borough of Manhattan, New York city, on or before the 20th day of December, 1907, specific answers, verified by an oath of an officer of each such corporation, to the following question which is hereby now addressed to each of them, to wit:

Give the name of every railroad corporation, street railroad corporation or common carrier organized or existing under the laws of the State of New York, of which, on July 1, 1907, you held any shares of the capital stock; the number of shares of capital stock then so held by you, and the par value of each such share.

Second, That every railroad corporation, street railroad corporation and common carrier organized or existing under or by virtue of the laws of the State of New York, be and they hereby are severally required to file with the said secretary, at said office, on or before said date, specific answers, verified by an oath of an officer of each such corporation, to the following question which is hereby now addressed to each of them, to wit:

Give the name of every stock corporation, railroad corporation, street railroad corporation or common carrier, which, on July 1, 1907, held any shares of your capital stock; the number of such shares then held by it, and the par value of each such share.

ORDER No. 137.— ISSUED DECEMBER 6, 1907.

Resolved, First, That every gas corporation, electrical corporation and every stock corporation holding any shares of the capital stock of any gas corporation or electrical corporation, be and they hereby are severally required to file with the secretary of the Public Service Commission for the First District, at its office, No. 154 Nassau street, borough of Manhattan, New York city, on or before the 20th day of December, 1907, specific answers, verified by

an oath of an officer of each such corporation to the following question which is hereby now addressed to each of them, to wit:

Give the name of every gas corporation or electrical corporation organized or existing under the laws of the State of New York, of which, on July 1, 1907, you held any shares of the capital stock; the number of shares of such capital stock then so held by you in each such corporation, and the par value of each such share.

Second, That every gas corporation and electrical corporation organized or existing under or by virtue of the laws of the State of New York be and they hereby are severally required to file with the said secretary, at said office, on or before said date, specific answers, verified by an oath of an officer of each such corporation, to the following question which is hereby now addressed to each of them, to wit:

Give the name of every stock corporation, gas corporation or electrical corporation, which, on July 1, 1907, held any shares of your capital stock; the number of such shares then held by it, and the par value of each such share.

LEO H. HIRSCH, Complainant,

against

NEW YORK CENTRAL AND HUDSON RIVER RAILROAD COMPANY, Defendant.

— ISSUED ORDER No. 138. DECEMBER 6, 1907.

This matter coming on upon the report of Commissioner Eustis recommending the dismissal of the complaint of Leo H. Hirsch, of 77 East Eighty-ninth street, Manhattan, against the New York Central and Hudson River Railroad Company on account of noises created by night work on the tracks of said railroad at Eighty-ninth street and Park avenue, the recommendation being based on investigation by the inspectors of the Commission which showed that all such noises were necessary and unavoidable, and that the complaint was therefore unjustifiable,

Now, Upon motion duly made and seconded, it is

Ordered, That the said report be approved, and that the complaint be and the same is hereby dismissed without trial.

ORDER No. 139.— ISSUED DECEMBER 9, 1907.

Ten day order on the complaint of Robert E. Anthony against Brooklyn Union Elevated Railroad Company regarding improper condition of ties and rails at Manhattan terminal of Brooklyn bridge.

For form, see Form Note I, above.

ORDER No. 140.— ISSUED DECEMBER 9, 1907.

Ten day order on the complaint of Joel B. Erhardt against New York Central and Hudson River Railroad regarding inadequate transportation to and inadequate facilities at Mt. Hope cemetery.

For form, see Form Note I, above.

ORDER No. 141.— ISSUED DECEMBER 9, 1907.

Ten day order on the complaint of Martha M. Russell against receivers of New York City Railway Company regarding noisy switch in front of hospital on Fifty-ninth street, Manhattan.

For form, see Form Note I, above.

ORDER No. 142.— ISSUED DECEMBER 9, 1907.

Ten day order on the complaint of J. P. Curtis against Coney Island and Brooklyn Railroad Company regarding improper condition of track at crossing over Atlantic avenue and at curve at Pacific street in Brooklyn.

For form, see Form Note I, above.

ORDER No. 143.— ISSUED DECEMBER 9, 1907.

Ten day order on the complaint of Robert E. Anthony against Coney Island and Brooklyn Railroad Company regarding dangerous condition of curve from Main street into Prospect street in Brooklyn.

For form, see Form Note I, above.

ORDER No. 144.— ISSUED DECEMBER 9, 1907.

Ten day order on the complaint of R. H. Nexsen against Nassau Electric Railroad Company regarding lack of traffic protection and obstruction of streets at various crossings on Sea Beach line.

For form, see Form Note I, above.

ORDER No. 145.— ISSUED DECEMBER 9, 1907.

Order against Interborough Rapid Transit Company for hearing to inquire whether service on Third avenue elevated line was reasonable and adequate, and if not found so to be to determine what changes, increases and improvements should be required therein.

For form, see Form Note II, above.

In the Matter of the Complaint of JOHN E. THOMPSON, Complainant,

vs.

UNION RAILWAY COMPANY OF NEW YORK CITY, INTERBOROUGH RAPID TRANSIT COMPANY and NEW YORK CITY INTERBOROUGH RAILWAY COMPANY, Defendants.

ORDER No. 146.— ISSUED DECEMBER 9, 1907.

This matter coming on upon the complaint of John E. Thompson bearing date September 7, 1907, and the answers thereto of Union Railway Company of New York City dated October 21, 1907, of Interborough Rapid Transit Company dated October 18, 1907, and New York City Interborough Railway Com-

pany dated November 11, 1907, and the report of the hearing had herein on November 15, 1907, November 19, 1907, and November 23, 1907, and it appearing that said hearing was held by and pursuant to an order of the Commission made and entered the 30th day of October, 1907, and returnable on said 15th day of November, 1907, and that said order for hearing was duly served upon said Union Railway Company of New York City and said Interborough Rapid Transit Company, and that said hearing was held by and before the Commission on the matters in said complaint, said answers and said order specified on said November 15, 1907, November 19, 1907, and November 23, 1907, Mr. Commissioner Eustis presiding, Oliver C. Semple, Esq., assistant counsel, appearing for the Commission, and Mr. Edward A. Maher, president, and Mr. A. T. McCabe, attorney, appearing for said Union Railway Company of New York City, and Mr. E. P. Bryan, president, and Mr. A. A. Gardner, attorney, appearing for the Interborough Rapid Transit Company, and the said New York City Interborough Railway Company having filed its answer to said complaint and also voluntarily appeared upon the said hearing by Alfred Skitt, its president, and A A. Gardner, its attorney, and consenting to be subject to the said order for hearing with the same force and effect as if named therein and as if the same had been served upon it;

Now, by the said complaint and the said answers thereto and after said hearing thereon, it being made to appear to this Commission that the said Interborough Rapid Transit Company, New York City Interborough Railway Company and Union Railway Company of New York City are common carriers of passengers, operating lines of railway in the streets of the city of New York; that through a connecting point at the One Hundred and Eighty-first street station on St. Nicholas avenue of the said Interborough Rapid Transit Company on its subway route, a continuous route for transportation of passengers over the lines of the said three defendants between One Hundred and Tenth street on Broadway, in Manhattan and Westchester, both in the city of New York, has been by said defendants created and offered to the public for use and has been by it used; that said Union Railway Company of New York City and New York City Interborough Railway Company are street surface railroads having franchises and tracks and operating as such in the city of New York, subject to the provisions of the Railroad Law, article IV, including the transfer provisions thereof; that said Union Railway Company of New York City and New York City Interborough Railway Company have, in respect of their separate tracks and franchises in said city, an operating contract or agreement for the use by each of the tracks and franchises of the other, with a fare of five cents (5¢) to each passenger and a right to such passenger to receive at specified places from each company and use for transportation on the other company's tracks and cars a transfer slip for a continuous trip within said city; that by the terms of a contract in writing between the said Union Railway Company of New York City and New York City Interborough Railway Company, bearing date May 8, 1906, it is also provided that the obligation of the Union Railway Company of New York City to give transfers shall be binding on such other lines of railroads above the Harlem river to which the Union Railway transfers passengers for a single fare of five cents (5¢); that by the terms of a contract in writing between the said Interborough Rapid Transit Company and New York City Inter-

borough Railway Company, bearing date April 29, 1905, every passenger upon any line of the New York City Interborough Railway Company may buy for three cents (3¢) in addition to the regular five cent (5¢) fare a coupon ticket entitling him to transfer and to continue his trip upon the line of the Interborough Rapid Transit Company (the subway) from said One Hundred and Eighty-first street station on St. Nicholas avenue, and conversely a passenger on the subway of said Interborough Rapid Transit Company may for eight cents (8¢) buy from the said Interborough Rapid Transit Company a special coupon ticket under which he is carried on its line and at said One Hundred and Eighty-first street station may transfer thence to said New York City Interborough Railway Company and be carried on the latter line without further fare, and that it is further provided by said contract that the same shall apply to all extensions of the lines of either party thereto and to all lines which either party may acquire as part of its railway system; that the complainant in this case is aggrieved by the fact that in traveling from his home to Westchester by the line of the Interborough Rapid Transit Company (the subway) from One Hundred and Tenth street to One Hundred and Eighty-first street, thence by the said New York City Interborough Railway Company to Aqueduct avenue, thence by said Union Railway Company of New York City to Westchester, he is carried by the said defendant companies for the sum of eight cents (8¢) represented by the Interborough Rapid Transit Company's said eight cents (8¢) special coupon ticket, and a transfer slip from the New York City Interborough Railway Company to said Union Railway Company of New York City; whereas on the return trip from Westchester to the same point at One Hundred and Tenth street and Broadway, over the same routes and lines operated by said defendants subject to the obligations aforesaid, he is required to pay ten cents (10¢), namely, a fare of five cents (5¢) to the said Union Railway Company of New York City for carriage over the Union Railway Company, and by transfer over the New York City Interborough Railway Company, and a further sum of five cents (5¢) upon the Interborough Rapid Transit Company (the subway), and he is refused by the said New York City Interborough Railway Company a coupon ticket for three cents (3¢) offered by him as a passenger on its cars under transfer slip from said Union Railway Company of New York City, to which he has as aforesaid paid five cents (5¢) for his fare.

And it further appearing that under the obligations of said New York City Interborough Railway Company and said Union Railway Company of New York City, as street surface railroads, and under their said agreement and under the terms of the said contract between said Interborough Rapid Transit Company and New York City Interborough Railway Company, applicable to extensions and acquisitions of the latter, the regulations and practices of the said defendants as affecting rates charged for transportation of passengers as aforesaid in charging ten cents (10¢) from Westchester to One Hundred and Tenth street, Manhattan, and eight cents (8¢) from One Hundred and Tenth street, Manhattan, to Westchester, over the same route, are unjust, unreasonable, unjustly discriminatory and unduly preferential and in violation of law, and that it will be just and reasonable to determine that the maximum fare and rate to be observed and enforced as the amount to be charged for the service to be performed by said defendants for the transportation of persons in the first district between said points as aforesaid shall be fixed as hereinafter set forth.

Therefore, on motion of Abel E. Blackmar, Esq., Counsel to the Commission, it is

Ordered, First, That the maximum rate to be charged by said Union Railway Company of New York City, New York City Interborough Railway Company and Interborough Rapid Transit Company for service to be performed by them in the carrying of each passenger from Westchester over the route of the Union Railway Company of New York City to Aqueduct avenue, thence over the route of the New York City Interborough Railway Company to One Hundred and Eighty-first street on St. Nicholas avenue, and thence over the route of the Interborough Rapid Transit Company to One Hundred and Tenth street, Manhattan, be the sum of eight (8¢) cents.

Second, That this order shall take effect on the 15th day of December, 1907, and shall continue in force from and after said date so long as the charge of eight cents (8¢) is made and required of each passenger by the said defendants for service performed by them in carrying such passenger from One Hundred and Tenth street, Manhattan, over the route of the said Interborough Rapid Transit Company to One Hundred and Eighty-first street on St. Nicholas avenue, thence over the route of the New York City Interborough Railway Company to Aqueduct avenue, and thence over the route of the Union Railway Company of New York City to Westchester.

And it is further ordered, That within five days the said Union Railway Company of New York City and the said New York City Interborough Railway Company and the said Interborough Rapid Transit Company notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

ORDER No. 147.— ISSUED DECEMBER 9, 1907.

Order against Brooklyn Union Elevated Railroad Company for hearing upon complaint of C. F. Mathison and answer of company thereto.

For form, see Form Note III, above.

ORDER No. 148.— ISSUED DECEMBER 11, 1907.

Order against New York City Railway Company and receivers of said company for hearing to inquire whether every car of said company should be passed through shops and overhauled.

For form, see Form Note II, above.

ORDER No. 149.— ISSUED DECEMBER 11, 1907.

Order against Forty-second Street, Manhattanville and St. Nicholas Avenue Railway Company for hearing to inquire whether service of company on its line was reasonable and adequate, and if not found so to be to determine what increases should be required therein.

For form, see Form Note II, above.

ORDER No. 150.— ISSUED DECEMBER 11, 1907.

Order against Interborough Rapid Transit Company for hearing to inquire whether its service on the Sixth avenue elevated line was reasonable and adequate, and if not found so to be to determine what increases, changes and improvements should be required therein.

For form, see Form Note II, above.

ORDER No. 151.— ISSUED DECEMBER 11, 1907.

Order against the Interborough Rapid Transit Company for hearing to inquire whether service on Second avenue elevated line was reasonable and adequate, and if not found so to be to determine what increases, changes and improvements should be required therein.

For form, see Form Note II, above.

ORDER No. 152.— ISSUED DECEMBER 11, 1907.

Order against the New York Central and Hudson River Railroad Company for hearing upon complaint of P. Friedleben and answer of company thereto.

For form, see Form Note III. above.

In the Matter

of

The Hearing on the Motion of the Commission as to the Regulations, Practices and Services of the BROOKLYN UNION ELEVATED RAILROAD COMPANY in the Respects Hereinafter Mentioned.

Under order for hearing made November 13, 1907.

ORDER No. 153.— ISSUED DECEMBER 11, 1907.

This matter coming on upon the report of the hearing had herein on the 26th day of November, 1907, and it appearing that the hearing was held by and pursuant to an order of this Commission made November 13, 1907, and that the said order was duly served upon the Brooklyn Union Elevated Railroad Company, and that the said service was by it duly acknowledged, and that the said hearing was held by and before the Commission on the matters in said order specified on November 26, 1907, and by adjournment duly had on the 3d day of December, 1907, and at each of said sessions Mr. Commissioner Bassett, presiding, and proof being taken, and Grosvenor H. Backus, Esq., assistant counsel, appearing for the Commission at each of said sessions, and Arthur N. Dutton, assistant general manager of the Brooklyn Union Elevated Railroad Company, appearing for said company at each of said sessions.

Now, It being made to appear by the proceedings on the said hearing that the regulations, practices, equipment, appliances and service of said company upon and near its line running from Wyckoff avenue and Palmetto street, near the boundary between the borough of Brooklyn and the borough of Queens to Lutheran cemetery in the borough of Queens, in respect to the transportation of persons and property in the first district, are unsafe, improper and inadequate, and that changes, improvements and additions thereto ought reasonably to be made in the manner below set forth in order to promote the security and convenience of the public, and in order to secure adequate service and facilities for the transportation of passengers, and it being made to

appear by said proceedings that the changes, additions and improvement of regulations, equipment and appliances of said company, as hereinafter set forth, are such as would be just, reasonable and proper and ought reasonably to be made in order to promote the security and convenience of the public and to secure adequate facilities for the transportation of passengers, and that such changes, additions and improvement ought reasonably to be made on or before the respective dates hereinafter specified.

Therefore, On motion of Abel E. Blackmar, Esq., Counsel to the Commission, it is

Ordered, 1. That the said Brooklyn Union Elevated Railroad Company complete the gates now in course of construction at the crossing of its Lutheran cemetery line at Fresh Pond road, and put said gates in actual operation in perfect running order on or before the 10th day of February, 1908.

2. That the said Brooklyn Union Elevated Railroad Company construct gates at the Forest avenue crossing on said Lutheran cemetery line, and put the same in actual operation in perfect running order on or before the 10th day of December, 1908; and that pending the operation of said gates at said Forest avenue crossing, said company maintain a flagman at said Forest avenue crossing.

3. That the said Brooklyn Union Elevated Railroad Company put all the gates on said Lutheran cemetery line in perfect running order on or before the 10th day of February, 1908; and that from and after the date of this order said company maintain lights at night upon all the gates at crossings on said Lutheran cemetery line.

4. That the said Brooklyn Union Elevated Railroad Company construct a suitable wooden platform at its station on the easterly side of Palmetto street near Covert avenue, on or before the 10th day of January, 1908.

And it is further ordered, That this order shall take effect immediately.

And it is further ordered, That before the 22d day of December, 1907, the said Brooklyn Union Elevated Railroad Company shall inform the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

ORDER NO. 154.— ISSUED DECEMBER 16, 1907.

Ten day order on the complaint of Rev. Otto Graesser against Dry Dock, East Broadway and Battery Railroad Company regarding inadequate service on Avenue B line.

For form, see Form Note I, above.

ORDER NO. 155.— ISSUED DECEMBER 16, 1907.

Ten day order on the complaint of G. J. Turnbull against Forty-second Street, Manhattanville and St. Nicholas Avenue Railroad Company regarding "car behind" nuisance and inadequate service on Broadway line.

For form, see Form Note I, above.

In the Matter of The Hearing on the Motion of the Commission as to the Regulations, Practices and Service of the BROOKLYN UNION ELEVATED RAILROAD COMPANY, in the Respects Hereinafter Mentioned. Under order for hearing made November 13, 1907.	ORDER NO. 156.—ISSUED DECEMBER 16, 1907.

This matter coming on upon the report of a hearing had herein on the 27th day of November, 1907, and it appearing that the said hearing was held by and pursuant to an order of this Commission made November 13, 1907, and that the said order was duly served upon the Brooklyn Union Elevated Railroad Company, and that the said service was by it duly acknowledged, and that the said hearing was held by and before the Commission on the matters in said order specified on November 27, 1907, and by adjournment duly had on the 30th day of November, 1907, and at each of said sessions Mr. Commissioner Bassett, presiding, and proof being taken, Arthur N. Dutton, Esq., assistant general manager of the Brooklyn Union Elevated Railroad Company, appearing for said company at each of said sessions,

Now, It being made to appear by the proceedings on the said hearing that the regulations, practices, equipment, appliances and service of said company upon its various lines in the boroughs of Brooklyn and Queens in the city of New York, with respect to the transportation of persons, freight and property, are unjust, unreasonable, unsafe, improper and inadequate, and that changes, improvements and additions thereto ought reasonably to be made in the manner below set forth, in order to promote the security and convenience of the public and in order to secure adequate service and facilities for the transportation of passengers in the first district; and it being made to appear on said proceeding that the changes, additions and improvement of regulations, equipment and appliances of said company, as hereinafter set forth, are such as will be just, reasonable and proper, and ought reasonably to be made in order to promote the security and convenience of the public and to secure adequate facilities for the transportation of passengers, and that such changes, additions and improvements ought reasonably to be made on or before the respective dates hereinafter specified;

Therefore, On motion of Abel E. Blackmar, Esq., Counsel to the Commission, it is

Ordered, 1. That the said Brooklyn Union Elevated Railroad Company procure one hundred and forty-three (143) additional station signs of a size and pattern similar to the signs now generally in use upon the lines of the said company, and place said signs at their stations at the following named points by or before the 10th day of February, 1908:

On the Fulton street line, one additional sign at the Court street station; two additional signs each at the Flatbush avenue, Manhattan junction, Atlantic avenue, Eastern parkway, Pennsylvania avenue and Grant avenue stations; and four additional signs at the Franklin avenue station.

On the Myrtle avenue line, six additional signs at the Bridge street station, and two additional signs each at the Vanderbilt avenue, Washington avenue, Franklin avenue, Nostrand avenue, Tompkins avenue, Sumner avenue, Evergreen avenue, and Knickerbocker avenue stations.

On the Broadway line, two additional signs each at the Myrtle avenue, Gates avenue, and Halsey street stations; three additional signs at the Manhattan crossing station; and four additional signs each at the Broadway ferry and Cypress Hills stations.

On the Fifth avenue line, four additional signs each as the Thirty-sixth street and Sixty-fifth street stations.

On the Brighton Beach line, two additional signs at Consumers' park station; four additional signs each at Dean street, Park place, Prospect park, Woodruff avenue, Church avenue, Beverly road, Avenue C, Avenue J, Avenue U, Avenue M, and Neck road stations; and eight additional signs each at the Newkirk avenue, Kings highway and Sheepshead Bay stations.

On the Culver line, one additional sign at the Parkville station.

On the Sea Beach line, two additional signs each at the Bath junction and Twenty-second avenue stations.

On the West End line, one additional sign at the Bath Beach station, and three additional signs at the Ulmer park station.

Each of said signs to be placed, wherever practicable, at the top of the platform railing, and in all cases to be placed as conspicuously as possible and to be maintained in such way that advertising signs, vending machines and other obstructions shall not interfere with a view of the signs.

2. That said company construct an additional stairway from the gallery landing to the northerly side of Broadway at the Gates avenue station and widen the stairway now leading from the gallery to the station platform as much as the side stringers will allow; this work to be completed by or before April 10, 1908.

3. That said company construct an additional stairway from the gallery landing to the northerly side of Broadway at the Halsey street station and widen the stairway leading from the gallery to the station platform as much as the side stringers will allow; this work to be completed before April 10, 1908.

4. That hereafter said company shall remove all unnecessary parts of the elevated structure of said company on Broadway in the borough of Brooklyn, when the new girders are inserted.

5. That said company remove the platform and station, including stairways from the structure of said company at the intersection of Fulton and Tillary streets, in the borough of Brooklyn, by or before March 2, 1908.

6. That the said company repair the station and stairways on the Fulton street line of said company at Lafayette avenue by or before February 10, 1908, and thereafter keep the same in first class order, whether used or not.

And it is further ordered, That this order shall take effect immediately.

And it is further ordered, That before the 27th day of December, 1907, the said Brooklyn Union Elevated Railroad Company shall inform the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

ORDER No. 157.— ISSUED DECEMBER 16, 1907.

Order against Interborough Rapid Transit Company for hearing upon complaint of Rev. Otto Graesser and answer of company thereto.

For form, see Form Note III, above.

ORDER No. 158.— ISSUED DECEMBER 16, 1907.

Order against New York City Interborough Railway Company for hearing upon complaint of T. J. Shine and answer of company thereto.

For form, see Form Note III, above.

ORDER No. 159.— ISSUED DECEMBER 16, 1907.

Order against Union Railway Company for hearing upon complaint of John Davis and answer of company thereto.

For form, see Form Note III, above.

ORDER No. 160.— ISSUED DECEMBER 16, 1907.

Order against Interborough Rapid Transit Company for hearing upon complaint of John Davis and answer of company thereto.

For form, see Form Note III, above.

In the Matter

of

The Adequacy of the Service and Equipment of the CONEY ISLAND AND BROOKLYN RAILROAD COMPANY, in the Respects Hereinbelow Mentioned.

ORDER No. 161.— ISSUED DECEMBER 11, 1907.

Whereas, This Commission made an order on the 9th day of October, 1907, for a hearing upon the service of the Coney Island and Brooklyn Railroad Company, in the matter of an increase of service between Park Circle and Coney Island, which was order No. 32 of this Commission; and

Whereas, Hearings have been held under said order; and

Whereas, It appears that on or about the 9th day of October, 1907, the said railroad company increased its service on said line to such an extent that cars were operated upon the following schedule, to wit:

1. Through cars from Coney Island to Park Row, in the borough of Manhattan, leaving Park Circle in the following manner:

Sixteen (16) cars between 12:01 a. m. and 5:30 a. m.; three (3) cars between 5:30 a. m. and 6:10 a. m.; thirty-five (35) cars between 6:10 a. m,

and 7:50 a. m.; eighty-nine (89) cars between 7:50 a. m. and 3:40 p. m.; fifty-one (51) cars between 3:40 p. m. and 6:15 p. m.; twenty-eight (28) cars between 6:15 p. m. and 8:05 p. m.; forty-seven (47) cars between 8:05 p. m. and 12 p. m.; and in addition thereto seven (7) cars from Coney Island to Fulton ferry, leaving Park Circle between 4:50 p. m. and 6:05 p. m.; and in addition thereto one hundred and twenty-nine (129) cars from Park Circle to Hamilton ferry, leaving Park Circle between 6:20 a. m. and 12:30 the following morning; and in addition thereto cars from the depot at Smith and Ninth streets to Park Row, borough of Manhattan, as follows: Twenty (20) cars leaving the depot between 4:42 a. m. and 7 a. m.; sixteen (16) cars leaving the depot between 7:44 a. m. and 9:14 a. m.; four (4) cars leaving the depot between 1:55 p. m. and 2:16 p. m.; and in addition thereto eight (8) cars from the depot at Smith and Ninth streets to Fulton ferry, leaving the depot between 3:50 p. m. and 5 p. m.; and in addition thereto thirty-nine (39) cars from Park Circle to Park Row, leaving Park Circle between 9 a. m. and 1:35 p. m.; and in addition thereto eight (8) cars from Park Circle to Fulton Ferry, leaving Park Circle between 4:52 p. m. and 6:02 p. m.

2. Through cars from Park Row, borough of Manhattan, to Coney Island, leaving Park Row in the following manner:

Fourteen (14) cars between 12:01 a. m. and 6:50 a. m.; four (4) cars between 6:50 a. m. and 7:37 a. m.; thirty-four (34) cars between 7:37 a. m. and 9:15 a. m.; sixty (60) cars between 9:15 a. m. and 3:26 p. m.; seventy-five (75) cars between 3:26 p. m. and 7:37 p. m.; fifty (50) cars between 7:37 p. m. and 11:45 p. m.; one (1) car between 11:45 p. m. and 12 p. m.; and in addition thereto eight (8) cars from Fulton ferry to Coney Island, leaving Fulton ferry between 6:05 p. m. and 7:20 p. m.; and in addition thereto eight (8) cars between Fulton ferry and Park Circle, leaving Fulton ferry between 4:10 p. m. and 5:20 p. m.; and in addition thereto one hundred and thirty-nine (139) cars from Hamilton ferry to Park Circle, leaving Hamilton ferry between 5:55 a. m. and 1 o'clock the following morning; and

Whereas, It appears that the service as thus increased furnishes reasonably adequate accommodation for the passengers offering themselves for transportation between Park Circle and Coney Island on the lines indicated; therefore be it

Resolved, That for the present no further action be taken on the matter of an increase in the number of cars operated over the line of said company between Park Circle and Coney Island, in the borough of Brooklyn; and be it further

Resolved, That this action of the Commission shall be without prejudice to the issuance of further orders for the increase of service on said line, as occasion may require.

Dated December 11, 1907.

ORDER NO. 162.— ISSUED DECEMBER 20, 1907.

Order against Interborough Rapid Transit Company for hearing to inquire whether company should be directed to keep in every car, sledges, axes, bars or tools for use to break through portions of the cars in case of accidents.

For form, see Form Note II, above.

ORDER NO. 163.— ISSUED DECEMBER 20, 1907.

Ten day order on the complaint of Robert E. Anthony against Brooklyn Union Elevated Railroad Company regarding failure to open gates on both sides of trains at Manhattan terminal of Brooklyn bridge during non-rush hours.

For form, see Form Note I, above.

In the Matter of the Complaint of SOUTH BROOKLYN BOARD OF TRADE, Complainant,

against

CONEY ISLAND AND BROOKLYN RAILROAD COMPANY, Defendant.

ORDER NO. 164.— ISSUED DECEMBER 20, 1907.

This matter coming on upon the complaint of South Brooklyn Board of Trade, bearing date the 29th day of October, 1907, and the answer thereto of Coney Island and Brooklyn Railroad Company, received November 13, 1907, and the report of the hearing had herein on December 4, 1907, and December 10, 1907, and it appearing that said hearing was held by and pursuant to an order of the Commission made and entered the 20th day of November, 1907, and returnable on said 4th day of December, 1907, and that said order for hearing was duly served upon said Coney Island and Brooklyn Railroad Company, and that said hearing was held by and before said Commission on the matters in said complaint, said answer and said order specified, on said 4th day of December, 1907, and said 10th day of December, 1907, Mr. Commissioner Bassett, presiding, Grosvenor H. Backus, Esq., assistant counsel, appearing for the Commission, and John J. Kuhn, Esq., appearing for said Coney Island and Brooklyn Railroad Company, and evidence being taken at said hearing;

Now, It being made to appear by the said complaint, answer and the proceedings on said hearing that the regulations, practices, equipment, appliances and service of said company in respect to transportation of persons within the first district are unreasonable, unsafe, improper and inadequate; and it appearing that the changes in the regulations, practices, equipment, appliances and service as are hereinafter specified, would be just, reasonable and proper, and ought reasonably to be put in force, observed and used in the transportation of persons; and it appearing that the repairs, improvements and changes hereinafter specified in the motive power and other property and devices used by said Coney Island and Brooklyn Railroad Company in connection with the transportation of passengers, ought reasonably to be made, and that additions should reasonably be made thereto in the manner hereinafter specified, in order to promote the security and convenience of the public, and in order to secure adequate service or facilities for the transportation of passengers, and that said repairs, improvements, changes and additions ought reasonably to be made within the times hereinafter specified,

Therefore, On motion of Abel E. Blackmar, Esq., Counsel to the Commission, it is

Ordered, 1. That the axle gears and armature pinions on the cars of said company shall, within one month after the date of this order, be replaced by new gears and pinions where the teeth thereof are worn down to less than one-sixteenth (1/16) of an inch on the top, and that thereafter no gears and pinions shall be used, the teeth of which present a smaller top than one-sixteenth (1/16) of an inch; that all gears and pinions on the cars of said company shall be operated with their gear cases maintained at least one-half (½) full of gear grease or other lubricant.

2. That all wheels on the cars of said company that show flat spots or undue wear shall be immediately replaced by wheels in good and proper condition.

3. That said company shall, within one month, thoroughly clean and varnish the interior of all its cars and shall hereafter maintain them in a cleanly and sanitary condition; that within one month from the date of this order, the seats in the closed cars that now have backs or seats covered with carpet shall have this carpet removed and the backs and seats covered with rattan, and that this covering shall be maintained in a cleanly and sanitary condition.

4. That all brake mechanism of cars shall be inspected and adjusted at sufficiently frequent intervals to maintain them in a thorough and efficient operating condition.

And it is further ordered, That this order shall take effect immediately.

And it is further ordered, That within five days, the said Coney Island and Brooklyn Railroad Company notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

In the Matter of The Hearing on the Motion of the Commission on the Question of the Adequacy of the Service of the BROOKLYN HEIGHTS RAILROAD COMPANY and the BROOKLYN UNION ELEVATED RAILROAD COMPANY, in Respect to the Present Service on the Jamaica Avenue Line of the said BROOKLYN HEIGHTS RAILROAD COMPANY and of the Lexington Avenue Line of the said BROOKLYN UNION ELEVATED RAILROAD COMPANY. Under order for hearing made October 11, 1907.	ORDER NO. 165.— ISSUED DECEMBER 20, 1907.

This matter coming on upon the report of the said hearing had herein on the 23d day of October, 1907, and it appearing that the said hearing was

held by and pursuant to an order of this Commission made October 11, 1907, and returnable on the 23d day of October, 1907, and that the said order was duly served upon the Brooklyn Heights Railroad Company, and that the said service was by it duly acknowledged, and that the said hearing was held by and before the Commission on matters in said order specified, on October 23, 1907, and by adjournment duly had on October 30, 1907, and by adjournment duly had on November 6, 1907, and at all of said sessions Mr. Commissioner Bassett, presiding, and proof being taken, and Grosvenor H. Backus, Esq., assistant counsel, appearing for the Commission at all of said sessions, and Arthur N. Dutton, Esq., appearing for the Brooklyn Heights Railroad Company at all of the said sessions, and the Brooklyn Union Elevated Railroad Company having also voluntarily appeared on the said hearing as if named in the said order of the Commission for said hearing, by Arthur N. Dutton, Esq., its assistant general manager, and having consented to be subject thereto, and an order having been made upon said proceedings on the 18th day of November, 1907, being Order No. 99 of this Commission, and said order having been duly served upon the Brooklyn Heights Railroad Company and the Brooklyn Union Elevated Railroad Company, and the said Brooklyn Union Elevated Company having asked for a reopening of said order upon the matters contained in paragraph numbered "3," and said order having been reopened in so far as relates to paragraph numbered "3" of said order, and a hearing being had thereon on the 9th day of December, 1907, Mr. Commissioner Bassett presiding, and proof being taken, and Mr. Arthur N. Dutton, assistant general manager of the Brooklyn Union Elevated Railroad Company, appearing for said company, and the report of said hearing being before the Commission, and due deliberation being had thereon,

Now, On motion of Abel E. Blackmar, Esq., Counsel to the Commission, it is

Ordered, That the said paragraph numbered "3" of said Order No. 99, dated November 18, 1907, be and the same hereby is amended so as to read as follows:

3. That the said company operate its Lexington avenue trains to and from Cypress Hills station with a headway of not more than seven and one-half (7½) minutes between said trains during the period between the morning and the evening rush hours, and during the period after the rush hours until 12 o'clock midnight, and that during the following periods said company make each of said trains a train of not less than four (4) cars: From the ending of the morning rush hours to and including trains leaving Cypress Hills station at 10:24 a. m.; from 2:30 p. m. to the beginning of the evening rush hours; from the end of the evening rush hours to and including the trains leaving Cypress Hills station at 7:21 p. m.

And it is further ordered, That this order shall take effect immediately.

And it is further ordered, That this order shall continue in force until the 27th day of November, 1908, but without prejudice to an order for further or additional hearings and action thereon by the Commission in respect of anything herein described prior to said 27th day of November, 1908.

And it is further ordered, That before the 27th day of December, 1907, said Brooklyn Union Elevated Railroad Company notify the Public Service Commission for the First District whether the terms of this order and the terms of said Order No. 99, dated November 18, 1907, as herein modified and amended, are accepted and will be obeyed.

ORDER NO. 166.— ISSUED DECEMBER 20, 1907.

Order against Coney Island and Brooklyn Railroad Company for rehearing as requested by company in respect to paragraph 2 of final order, 131.

In the Matter

of

The Application of the LONG ISLAND RAILROAD COMPANY for Permission to Change the Rate on Chicory from Flushing, N. Y., to Long Island City, N. Y.

ORDER NO. 167.— ISSUED DECEMBER 27, 1907.

Whereas, The present rate on chicory from Flushing, N. Y., to Long Island City, N. Y., as shown in P. S. C. — 1 N. Y. No. 48, is 5 cents per 100 pounds, subject to a minimum weight of 36,000 pounds per car;

Now, It being understood that the approval by the Commission of the publication of the rate below indicated is not to carry with it the approval of the rate itself, upon motion duly made and seconded, it is

Resolved, That the Long Island Railroad Company be granted permission to put into effect, three days after publication at stations and filing with the Commission, a rate of 5 cents per 100 pounds on chicory in bags, boxes or barrels, in carloads, subject to a minimum weight of 20,000 pounds per car, from Flushing, N. Y., to Long Island City, N. Y.

ROBERT E. ANTHONY, Complainant,

against

BROOKLYN UNION ELEVATED RAILROAD COMPANY, Defendant.

ORDER NO. 168.— ISSUED DECEMBER 27, 1907.

This matter coming on upon the report of the hearing had herein on December 9, 1907, and it appearing that the said hearing was held by and pursuant to an order of this Commission, made the 25th day of November, 1907, upon the complaint and answer herein, and that the said order was duly served upon said Robert E. Anthony, complainant, and upon said Brooklyn Union Elevated Railroad Company, and that the said service was by said company duly acknowledged, and that the said hearing was held by and before the Commission on the matters in said complaint, answer and order specified on December 9, 1907, and by adjournment duly had on December 13, 1907, and at all of said sessions Mr. Commissioner Bassett presiding, and Mr. Arthur N. Dutton, assistant general manager of said Brooklyn Union Elevated Railroad Company, appearing for said company,

Now, On motion of Abel E. Blackmar, Esq., Counsel to the Commission,

Ordered, That the said complaint be, and the same hereby is dismissed, and that this order be filed in the office of the Commission. And it is further

Ordered, That this order shall be without prejudice to an order for further or additional hearings and action thereon by the Commission in respect of any of the matters covered by said complaint and answer, or the proceedings thereon.

ORDER No. 169.— ISSUED DECEMBER 27, 1907.

Ten day order on the complaint of Claremont Heights Property Owners' Association of the twenty-third and twenty-fourth wards against Union Railway Company, regarding failure to extend Morris avenue line north to One Hundred and Sixty-first street.

For form, see Form Note I, above.

ORDER No. 170.— ISSUED DECEMBER 27, 1907.

Order against Union Railway Company of New York City upon complaint of George A. Denholm and George W. M. Clark and answer of company thereto.

For form, see Form Note III, above.

In the Matter

of

The Hearing on the Motion of the Commission on the Question of Improvement in and Additions to the Service and Equipment of the NEW YORK CITY RAILWAY COMPANY and of ADRIAN H. JOLINE and DOUGLAS ROBINSON, Receivers of the said Company.

Under order for hearing made November 27, 1907.

ORDER No. 171.— ISSUED DECEMBER 27, 1907.

This matter coming on upon the report of the hearing had herein December 11, 1907, and it appearing that the said hearing was held by and pursuant to an order of this Commission, made November 27, 1907, and returnable on December 11, 1907, and that the said order was duly served upon the said New York City Railway Company and upon Douglas Robinson and Adrian H. Joline, receivers of the New York City Railway Company, and that said service was duly acknowledged by the New York City Railway Company and by Douglas Robinson and Adrian H. Joline, receivers of the New York City Railway, and that the said hearing was held by and before the Commission on the matters in said order specified, on the 11th day of December, 1907, before Mr. Commissioner Maltbie, presiding, Arthur DuBois, Esq., appearing for the Commission and no one appearing for the New York City Railway

Company or for Douglas Robinson and Adrian H. Joline, as receivers of the New York Railway Company, and proof being taken,

Now, It being made to appear by the proceedings on the said hearing that the service of the New York City Railway Company and of Douglas Robinson and of Adrian H. Joline, as receivers of the New York Railway Company, in the transportation of persons in the first district on the Eighth avenue line has been and is unreasonable, improper and inadequate and that the said New York City Railway Company and the said Adrian H. Joline and Douglas Robinson, receivers of the New York City Railway Company, do not run cars enough on its Eighth avenue line, reasonably to accommodate the traffic offered for transportation to it, and that it will be just, reasonable and proper that the said service of the New York City Railway Company and of Douglas Robinson and of Adrian H. Joline, as receivers of the New York City Railway Company, on the Eighth avenue line, should be supplemented in the particulars hereinafter set forth at the points and at the times as hereinafter set forth.

Therefore, On motion of Abel E. Blackmar, Esq., Counsel to the Commission, it is

Ordered, That the service of the New York City Railway Company and of Douglas Robinson and of Adrian H. Joline, receivers of the New York City Railway Company, on its Eighth avenue line, be supplemented and changed as follows:

1. By running south from One Hundred and Forty-ninth street, daily except Sundays, cars as follows:

Between 7 a. m. and 10 a. m. not less than one hundred and ten (110) cars, to run at least as far south as Thirteenth street.

Between 6.30 p. m. and 8.30 p. m. not less than seventy (70) cars, to run at least as far south as Thirteenth street.

2. By running north from Thirteenth street, daily except on Sunday, cars as follows:

Between 4.30 p. m. and 6.30 p. m. not less than one hundred and thirty (130) cars, to run at least as far north as One Hundred and Forty-ninth street.

Between 10 p. m. and 11.30 p. m. not less than fifty (50) cars, to run at least as far north as One Hundred and Forty-ninth street.

3. By running on Sundays, south from One Hundred and Forty-ninth street, cars as follows:

Between 10 a. m. and 11.30 p. m. not less than six hundred (600) cars, to run at least as far south as Thirteenth street.

4. By running not less than six (6) cars in each hour of the night and morning, daily and Sundays, from Thirteenth street north to One Hundred and Forty-ninth street, and from One Hundred and Forty-ninth street south at least to Thirteenth street, the cars to be as evenly distributed as possible, in each hour.

And it is further ordered, That this order shall take effect on January 15, 1908.

And it is further ordered, That the provisions of this order shall apply to and be binding upon Adrian H. Joline and Douglas Robinson as receivers of the New York City Railway Company, and shall apply to and be binding

upon their successors in the same manner as the New York City Railway Company would be bound if the receivers were not in possession.

And it is further ordered, That before January 5, 1908, the said New York City Railway Company and Adrian H. Joline and Douglas Robinson, as receivers of the New York City Railway Company, notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

In the Matter of The Hearing on the Motion of the Commission as to the Regulations, Practices and Service of the BROOKLYN UNION ELEVATED RAILROAD COMPANY, in the Respects Hereinafter Mentioned. Under order for hearing made November 13, 1907.	ORDER No. 172.— ISSUED DECEMBER 27, 1907.

This matter coming on upon the application of the Brooklyn Union Elevated Railroad Company, dated December 16, 1907, for a modification of Order No. 153 of this Commission made the 11th day of December, 1907, in respect to paragraph numbered "4" of said Order No. 153 in relation to the platform at the station on the easterly side of Palmetto street near Covert avenue, and due deliberation being had upon said application, and it appearing that it would be just, reasonable and proper to modify said order in the manner hereinafter specified,

Therefore, On motion of Abel E. Blackmar, Esq., Counsel to the Commission, it is

Ordered, That the said paragraph numbered "4" of said Order No. 153, dated December 11, 1907, be and the same hereby is modified and amended so as to read as follows:

4. That the said Brooklyn Union Elevated Railroad Company place its present platforms at the Covert avenue station of its Lutheran cemetery line in good condition on or before the 10th day of January, 1908; and that on or before the 1st day of May, 1908, said company construct at this point a new platform or platforms of wood or cement of suitable and safe design.

And it is further ordered, That this order shall take effect immediately.

And it is further ordered, That within five days, said Brooklyn Union Elevated Railroad Company notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

In the Matter of the Complaint of C. F. MATHISON, Complainant,

against

BROOKLYN UNION ELEVATED RAILROAD COMPANY, Defendant.

ORDER No. 173.— ISSUED DECEMBER 27, 1907.

This matter coming on upon the complaint of C. F. Mathison, bearing date the 6th day of November, 1907, and the answer thereto of Brooklyn Union Elevated Railroad Company, bearing date the 22d day of November, 1907, and the report of the hearing had herein on the 17th day of December, 1907, and the 20th day of December, 1907, and it appearing that said hearing was held by and pursuant to an order of the Commission made and entered the 9th day of December, 1907, and returnable on said 17th day of December, 1907, and that said order for hearing was duly served upon said Brooklyn Union Elevated Railroad Company, and that said hearing was held by and before this Commission on the matters in said complaint, said answer and said order specified on said 17th day of December, 1907, and said 20th day of December, 1907, Mr. Commissioner Bassett, presiding at each of said sessions, and Mr. Arthur N. Dutton, assistant general manager of said Brooklyn Union Elevated Railroad Company, appearing for said company at each of said sessions and evidence being taken,

Now, It being made to appear by said complaint, answer and the proceedings on said hearing that the regulations, practices, equipment, appliances and services of said company in respect to transportation of persons within the first district are unreasonable, unsafe, improper and inadequate, and it appearing that the changes in the regulations, practices, equipment, appliances and service hereinafter specified would be just, reasonable and proper and ought reasonably to be put in force, observed and used in the transportation of persons, and it appearing that the repairs, improvements and changes hereinafter specified in the property and devices used by said company in connection with the transportation of passengers ought reasonably to be made, and that additions should reasonably be made thereto in the manner hereinafter specified in order to promote the security and convenience of the public, and in order to secure adequate service or facilities for the transportation of passengers, and that said repairs, improvements, changes and additions ought reasonably to be made within the times hereinafter specified,

Therefore, On motion of Abel E. Blackmar, Esq., Counsel to the Commission, it is

Ordered, 1. That said Brooklyn Union Elevated Railroad Company construct and maintain proper partitions to break the force of the wind on the westerly platform of the Thirty-sixth street station on the Fifth avenue line of said company, the same to be completed on or before the 25th day of January, 1908.

2. That said company reconstruct the waiting-room at the northerly end of the westerly platform of said Thirty-sixth street station, making the same neat and accessible, with the interior light, and properly ventilated; and that said company shall maintain the same as a first-class passenger waiting-room, and shall keep the same properly heated in cold weather. These changes and improvements shall be completed on or before the 25th day of January, 1908.

3. That said company immediately renovate and properly repair and refit the waiting-room on the southerly end of the easterly platform of said Thirty-sixth street station, and that said company shall maintain the same as a first-class passenger waiting-room.

And it is further ordered, That this order shall take effect immediately.

And it is further ordered, That within five days the said Brooklyn Union Elevated Railroad Company notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

In the Matter of The Hearing on the Motion of the Commission on the Question of Improvement in and Additions to the Service and Equipment of the STATEN ISLAND RAILWAY COMPANY. Under order for hearing made November 8, 1907.	ORDER NO. 174.— ISSUED DECEMBER 27, 1907.

This matter coming on upon the report of the hearing had herein on the 22d day of November, 1907, and it appearing that the said hearing was held by and pursuant to an order of this Commission, made November 8, 1907, and returnable on the 22d day of November, 1907, and that the said order was duly served upon the Staten Island Railway Company, and that the said service was by it duly acknowledged, and that the said hearing was held by and before the Commission on the matters in said order specified, on November 22, 1907, before Commissioner McCarroll, presiding, Abel E. Blackmar, Esq., appearing for the Commission, Joseph P. Cotton, Esq., appearing for the Staten Island Railway Company, and by adjournment duly had on November 26, 1907, and by adjournment duly had on December 3, 1907, and by adjournment duly had on December 10, 1907, at all of which adjourned sessions Arthur DuBois, Esq., appearing for the Commission, and Joseph P. Cotton, Esq., appearing for the Staten Island Railway Company, Mr. Commissioner Eustis, presiding at the hearing of December 3, 1907, and Mr. Commissioner McCarroll, presiding at all other adjourned sessions, and proof having been taken at all of said sessions,

Now, It being made to appear after the proceeding upon said hearing that the regulations, equipments, appliances and service of the Staten Island Rail-

way Company in respect to transportation of persons in the first district has been and is unsafe, unreasonable, improper, and inadequate, and that changes, improvements and additions thereto ought reasonably to be made in the manner below set forth, in order to promote the security or convenience of the public, or of its employees, or in order to secure adequate service and facilities for the transportation of passengers, and it being made to appear that the changes, additions and improvements in regulations, equipment, appliances and service of the said company, as below set forth, are such as are just, reasonable, safe, adequate and proper and ought reasonably to be made to promote the security and convenience of the public and employees.

Therefore, On motion of Abel E. Blackmar, Esq., Counsel to the Commission, it is

Ordered, 1. That the Staten Island Railway Company adopt the following precautions and install, at or near grade crossings and maintain the following appliances for the better protection of its employees and the public.

(A) *Bells and Signals.*

At all double track crossings not provided with gates, the company shall provide and maintain two automatic, electrically operated warning bells, one on each side of the track and diagonally opposite to each other, so that both bells, at any given crossing, shall be rung by every train passing that crossing, and one bell at all single track crossings, the company to maintain all bells and signals in good working order and test same at each crossing at least once daily, in the morning, reports of such tests to be regularly made and promptly filed at the principal operating office of the company.

The provisions of this subdivision to be completed not later than March 15, 1908.

(B) *Warning Signs.*

At every grade crossing where double tracks occur, warning signs shall be properly located and maintained, one on either side of the track and diagonally opposite each other, and where one track only occurs, one such sign shall be properly located and maintained.

The provisions of this subdivision to be completed not later than February 10, 1908.

(C) *Planking.*

Where there are two tracks, each crossing, specified below, shall be planked for the full width between the rails and have one twelve-inch plank outside of each outer rail, such planking to extend across the full width of the highway and filling between guard planks to be kept evenly graded with the top of the rails and solidly packed.

Bay View avenue, Richmond Valley road, Church street, East Broadway, Tompkins avenue, Old Town road, Sea View avenue, Amboy road (second crossing going south), Washington avenue and Coleaux avenue, Whitlock station (three crossings), Amboy road (first crossing going south), Giffords lane, Eltingville road, Annadale road, Huguenot avenue.

The provisions of this subdivision to be completed not later than March 15, 1908.

(D). *Gates.*

At the Lincoln avenue crossing in Grant City, a single arm gate or bar shall be installed and a flagman shall be kept on duty at this point to operate it, during the months from May 1st to October 1st.

The provisions of this subdivision to be completed not later than May 1, 1908.

(E) *Flagman.*

That a flagman shall be stationed at each of the grade crossings on Williams street and Tyrrell street, Tottenville, to remain on duty during all hours in which trains are scheduled to cross these streets.

The provisions of this subdivision to be complied with not later than May 1, 1908.

2. That all trains be so run as to connect with the Municipal ferry boats at St. George.

The provisions of this section to take effect immediately.

Smoke and Noise.

3. That the Staten Island Railway Company prohibit and take all necessary steps to prevent all unnecessary and unreasonable noises and smoke nuisances from engines or shops which it owns or controls at Clifton, St. George or Tottenville, or at any other point or points where engines run or are allowed to stand.

That all labor on Sunday by or for the company, be prohibited, excepting the works of necessity and charity. In works of necessity or charity is included whatever is needful during the day for the good order, health or comfort of the community.

The provisions of this section to take effect immediately.

Lamps and Lighting.

4. That the Staten Island Railway Company instal, use and keep in good condition, a sufficient number of new lamps of the so-called "Belgian" station lamp type, or other suitable lamps of at least equal candle power, similar to the lamp exhibited to the Commission at the hearing, adequately to light the stations and platforms at the following places:

Tottenville, Richmond Valley, Huguenot, Annadale, Pleasant Plains, Great Kills, New Dorp, Grant City, Dongan Hills, Grasmere.

The provisions of this section to be completed as soon as possible and not later than April 1, 1908.

5. That the following additions, changes and readjustment of service and time schedules be put in effect without unnecessary delay, but not later than February 1, 1908.

(A). By running a train of not less than three cars to leave Tottenville daily, except on Sundays and holidays, between trains shown as No. 3 and No. 5 on official time table dated October 14, 1907, such train to run to St. George, making all stops between Tottenville and Grasmere, except that the stop at Whitlock may be on flag signal, the train to reach St. George in time to connect with the 7.30 boat from Manhattan.

(B). By running an additional train to leave St. George daily, except Sundays and holidays, between trains No. 34 and No. 36, shown on official time

table dated October 14, 1907, said train to leave after arrival of Municipal ferry boat leaving Manhattan at 7 p. m. and to make all stops to Tottenville.

(C). By running an additional train to leave St. George after the arrival of the Municipal ferry boat which leaves Manhattan at 12 o'clock midnight and to make all stops, regular or on signal, to Tottenville.

And it is further ordered, That this order shall continue in force for a period of two years from and after taking effect of the same, but without prejudice to an order for further or additional hearing and action thereon by the Commission, in respect of anything herein prescribed or in respect of anything covered by the order for hearing herein, prior to the expiration of said period of two years.

And it is further ordered, That before January 10, 1908, the said Staten Island Railway Company notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

In the Matter of The Hearing on the Motion of the Commission on the Question of Improvement in and Additions to the Service and Equipment of the STATEN ISLAND RAPID TRANSIT RAILWAY COMPANY. Under order for hearing made November 8, 1907.	ORDER No. 175.— ISSUED DECEMBER 27, 1907.

This matter coming on upon the report of the hearing had herein on the 22d day of November, 1907, and it appearing that the said hearing was held by and pursuant to an order of this Commission, made November 8, 1907, and returnable on the 22d day of November, 1907, and that the said order was duly served upon the Staten Island Rapid Transit Railway Company, and that the said service was by it duly acknowledged, and that the said hearing was held by and before the Commission on the matters in said order specified, on November 22, 1907, before Commissioner McCarroll, presiding, Abel E. Blackmar, Esq., appearing for the Commission, Joseph P. Cotton, Esq., appearing for the Staten Island Rapid Transit Railway Company, and by adjournment duly had on November 26, 1907, and by adjournment duly had on December 3, 1907, and by adjournment duly had on December 10, 1907, at all of which adjourned sessions Arthur DuBois, Esq., appearing for the Commission, and Joseph P. Cotton, Esq., appearing for the railways. Mr. Commissioner Eustis, presiding at the session of December 3, 1907, and Mr. Commissioner McCarroll, presiding at all other adjourned sessions, and proof having been taken at all of said sessions.

Now, It being made to appear after the proceeding upon said hearing that the regulations, equipments, appliances and service of the Staten Island

Rapid Transit Railway Company in respect to transportation of persons in the first district have been and are unsafe, unreasonable, improper and inadequate, and that changes, improvements and additions thereto ought reasonably to be made in the manner below set forth, in order to promote the security or convenience of the public, or of its employees, or in order to secure adequate service and facilities for the transportation of passengers, and it being made to appear that the changes, additions and improvements in regulations, equipment, appliances and service of the said company, as below set forth, are such as are just, reasonable, safe, adequate and proper and ought reasonably to be made to promote the security and convenience of the public and employees,

Therefore, On motion of Abel E. Blackmar, Esq., Counsel to the Commission, it is

Ordered, 1. That the Staten Island Rapid Transit Railway Company adopt the following precautions and install and maintain the following appliances for the better protection of its employees and the public.

(A.) *Bells and Signals.*

At all double track crossings not provided with gates, the company shall provide and maintain two automatic, electrically operated, warning bells, one on each side of the track and diagonally opposite to each other, so that both bells, at any given crossing, shall be rung by every train passing that crossing, and one bell at all single track crossings, the company to maintain all bells and signals in good working order and test same at each crossing at least once daily, in the morning, reports of such tests to be regularly made and promptly filed at the principal operating office of the company.

That warning bells be so installed and maintained as to ring for trains going in either direction at the following street crossings:

Jersey street, New Brighton, crossing to coal dock and shop yard at West Brighton, Broadway, Port Richmond, Maple avenue, Elm street, Sharpe avenue, Lafayette avenue, Morning Star road, Van Pelt avenue, Central avenue, Union avenue, South avenue on the North Shore division, Arietta street, Thompson street, Dock street, St. Mary's avenue, Tompkins avenue, Sand lane on the South Shore division. The provisions of this subdivision to be complied with not later than March 15, 1908.

(B.) *Warning Signs.*

At Snug Harbor, a suitable sign to be installed, warning the engineer of trains approaching in either direction of the crossing to the coal dock and freight platform of Sailors' Snug Harbor:

At Broadway, Maple avenue, Elm street, Sharpe avenue, John street, suitable street crossing signs.

At Nicholas street, signs for both sides of the track, the sign now in place to be repaired.

At Maple avenue, St. Mary's avenue, suitable street crossing signs.

Chestnut avenue, sign to be put in good repair. The provisions of this subdivision to be complied with not later than February 10, 1908.

(C.) *Gates.*

That the Staten Island Rapid Transit Railway Company install, maintain and operate at all regular hours of traffic, over the company's tracks, suitable double arm gates, at the Broadway crossing, Port Richmond, and single arm gates at Lafayette avenue and Douglas street and Newark avenue.

At Tompkins avenue and at Sand lane (South Beach station) double arm gates to be maintained and operated at all hours of regular traffic, during the months from May 1st to October 1st. The provisions of this subdivision to be complied with not later than March 15, 1908.

(D.) *Lamps and Lighting.*

That the Staten Island Rapid Transit Railway Company install, maintain and use new lamps of the so-called "Belgian" station lamp type or other suitable lamp of at least equal candle power to the lamp produced by the Staten Island Rapid Transit Railway Company at the hearing before the Commission, in sufficient numbers adequately to light the stations and platforms at New Brighton, Snug Harbor, Livingston, West New Brighton, Port Richmond, Elm park, Tompkinsville, Stapleton. The provisions of this subdivision to be complied with not later than February 15, 1908.

2. That all passenger cars used by the Staten Island Rapid Transit Railway Company be adequately lighted. The provisions of this subdivision to take effect at once.

Train Schedules.

3. That all trains operated by the Staten Island Rapid Transit Railway Company, either on the North Shore or South Shore divisions, connect at St. George with boats of the Municipal ferry. The provisions of this section to take effect not later than January 15, 1908.

Smoke and Noise.

4. That the Staten Island Rapid Transit Railway Company prohibit and take all necessary steps to prevent all unnecessary and unreasonable noise and smoke nuisances from engines or shops which it owns or controls at Clifton and St. George, or at any other point or points where engines run or are allowed to stand.

That all labor on Sunday by or for the company be prohibited, excepting the works of necessity and charity. In works of necessity or charity is included whatever is needful during the day for the good order, health or comfort of the community.

The provisions of this section to take effect immediately.

And it is further ordered, That this order shall continue in force for a period of two years from and after taking effect of the same, but without prejudice to an order for further or additional hearings and action thereon by the Commission, in respect of anything herein prescribed or in respect of anything covered by the order for hearing herein, prior to the expiration of said period of two years.

And it is further ordered, That before January 10, 1908, the said Staten Island Rapid Transit Railway Company notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

In the Matter of THOMAS J. SHINE, and 128 others, Complainants,

against

NEW YORK CITY INTERBOROUGH RAILWAY COMPANY, Defendant.

Under order for hearing made December 16, 1907.

ORDER NO. 176.— ISSUED DECEMBER 27, 1907.

This matter coming on upon the report of the hearing had herein on the 23d day of December, 1907, and it appearing that the said hearing was held by and pursuant to an order of this Commission, No. 158, made December 16, 1907, and returnable on the 23d day of December, 1907, and that said order was duly served upon said New York City Interborough Railway Company on December 16, 1907, and that said service was by it duly acknowledged, and that the said hearing was held by and before the Commission on the matters embraced in the complaint and answer herein, and in said order specified, on the 23 day of December, 1907, before Commissioner Eustis, presiding, Harry M. Chamberlain, Esq., appearing for the Commission, and A. A. Gardner, Esq., appearing for the said railway company, and proof having been taken upon said hearing, and it being made to appear by the proceedings on said hearing that the service of said railway company in respect to the transportation of persons upon its line in the city and State of New York are unjust, unreasonable, unsafe, improper and inadequate on account of the matters in said complaint set forth and in said answer admitted, and on account of the matters proved upon the hearing herein,

Now, On motion of Abel E. Blackmar, Esq., it is

Ordered, That the said New York City Interborough Railway Company be and it hereby is directed and required to run one line of cars on its Aqueduct avenue line, through and from Kingsbridge road, over its Aqueduct avenue line and over its Ogden avenue line in a continuous passage, without change, to the One Hundred and Fifty-fifth street terminus of the Sixth and Ninth avenues elevated roads, and connecting with the cars of the elevated roads at that point; and a continuous passage, without change, from the One Hundred and Fifty-fifth street terminus of the said elevated lines over the said Ogden avenue line and the said Aqueduct avenue line to and through said Kingsbridge road, and that said cars be run between the hours of 6 a. m. and 8 p. m. at intervals of not more than 10 minutes, and from 8 p. m. to 1 a. m. at intervals of not more than 15 minutes, and from 1 a. m. to 6 a. m. at intervals of not more than 30 minutes. It is further

Ordered, That said schedule be put into effect by said New York City Interborough Railway Company not later than the 8th day of January, 1908, and continue until such time as the Public Service Commission shall otherwise order. It is further

Ordered, That said New York City Interborough Railway Company notify the Public Service Commission for the First District within five days after the service of this order whether the terms of this order are accepted and will be obeyed.

JOHN DAVIS, Complainant,

against

INTERBOROUGH RAPID TRANSIT COMPANY, Defendant.

ORDER No. 177.— ISSUED DECEMBER 30, 1907.

This matter coming on upon the report of the hearing had herein on December 24, 1907, and it appearing that the said hearing was held by and pursuant to an order of this Commission made the 16th day of December, 1907, upon the complaint and answer herein, and that the said order was duly served upon John Davis, complainant, and upon Interborough Rapid Transit Company, and that the said service was by said company duly acknowledged, and that the said hearing was held by and before the Commission on the matters in said complaint, answer and order specified on December 24, 1907, at which hearing Mr. Commissioner Eustis presided, and Arthur DuBois, Esq., assistant counsel, appearing for the Public Service Commission for the First District, and Alfred A. Gardner, Esq., appearing for Interborough Rapid Transit Company.

Now, On motion of Abel E. Blackmar, Esq., Counsel to the Commission, it is

Ordered, That the said complaint be and the same hereby is dismissed, and that this order be filed in the office of the Commission; and it is

Further ordered, That this order shall be without prejudice to an order for further or additional hearings and action thereon by the Commission in respect of any of the matters covered by said complaint and answer or the proceedings thereon.

OTTO GRAESSER, Complainant,

against

INTERBOROUGH RAPID TRANSIT COMPANY, Defendant.

ORDER No. 178.— ISSUED DECEMBER 30, 1907.

This matter coming on upon the report of the hearing had herein on December 24, 1907, and it appearing that the said hearing was held by and pur-

suant to an order of this Commission made the 16th day of December, 1907, upon the complaint and answer herein, and that the said order was duly served upon Otto Graesser, complainant, and upon Interborough Rapid Transit Company, and that the said service was by said company duly acknowledged, and that the said hearing was held by and before the Commission on the matters in said complaint, answer and order specified on December 24, 1907, at which hearing Mr. Commissioner Eustis presided, and Arthur DuBois, Esq., assistant counsel, appearing for the Public Service Commission for the First District, and Alfred A. Gardner, Esq., appearing for Interborough Rapid Transit Company,

Now, On motion of Abel E. Blackmar, Esq., Counsel to the Commission, it is

Ordered, That the said complaint be and the same hereby is dismissed, and that this order be filed in the office of the Commission; and it is

Further ordered, That this order shall be without prejudice to an order for further or additional hearings and action thereon by the Commission in respect of any of the matters covered by said complaint and answer or the proceedings thereon.

In the Matter of The Hearing on the Motion of the Commission on the Question of Repairs, Improvements and Additions to Equipment and Appliances, including Rolling Stock, of the NEW YORK CITY RAILWAY COMPANY and of ADRIAN H. JOLINE and DOUGLAS ROBINSON, as Receivers of said Company, in the Particulars Hereinafter Set Forth.	ORDER No. 179.— ISSUED DECEMBER 30, 1907.

This matter coming on upon the report of the hearing duly held herein on the 21st day of December, 1907, pursuant to an order of the Commission made December 11, 1907, which said order was duly served on said New York City Railway Company and on said Adrian H. Joline and Douglas Robinson, as receivers of said company, on the 11th day of December, 1907, which said service was thereafter duly acknowledged, and said hearing having been held by and before the Commission on the matters embraced and specified in said order, Commissioner Maltbie, presiding, Mr. Henry H. Whitman appearing for the Commission, and no one appearing in behalf of said New York City Railway Company nor in behalf of said Adrian H. Joline and Douglas Robinson, as receivers of said company, and proof having been duly taken upon said hearing, and it appearing therefrom, in the opinion and judgment of the Commission, that the equipment, appliances and devices of said New York City Railway Company, in connection with the transportation of passengers

in the city of New York, are unsafe, improper and inadequate, and that in order to promote the security and convenience of the public and employees of said company, and to secure adequate service and facilities for the transportation of passengers in the city of New York, the repairs hereinafter directed ought reasonably to be made, and that the time hereinafter given within which to make such repairs and improvements is reasonable,

Now, On motion of Abel E. Blackmar, Esq., Counsel for the Commission, it is

Ordered, That the cars, operated in the city of New York, of said New York City Railway Company, or of said receivers, receive a thorough inspection, covering car bodies, motor and electric equipment, wiring and trucks, and that said cars be thoroughly overhauled and repaired so that when completed they and each of them shall be in first class operating and substantially new condition, having safe, proper and adequate car bodies, headlights, pilot fenders, wiring, brasses, commutators, field coils and armature windings, trucks, brakes, controllers, automatic circuit breakers, resistances, axle gear wheels, armature pinions and car wheels and it is further

Ordered, That on and after the 15th day of February, 1908, the said New York City Railway Company, or its receivers, turn out not fewer than ten of said cars daily, not including Sundays and legal holidays, so overhauled and repaired as aforesaid; and it is further

Ordered, That said New York City Railway Company, or its said receivers, notify the Commission daily in writing, in a form to be prescribed by the Commission, of the number of said cars so turned out as aforesaid, giving the identification numbers thereof, and when and where the same are to be tested; and it is further

Ordered, That from and after the 15th day of February, 1908, the said New York City Railway Company, or its said receivers, furnish and forward daily a transcript of the daily entries in the so-called "run in" book or books, showing, among other things, which of said cars are out of order; and it is further

Ordered, That said New York City Railway Company, or its said receivers, notify this Commission in writing, within five days after the service of this order, whether its terms are accepted and will be obeyed.

In the Matter

of

A Uniform System of Accounts to be Used by Steam Railroads in the First District.

ORDER NO. 180.— ISSUED DECEMBER 31, 1907.

The Public Service Commission for the First District, being authorized by section 52 of the Public Service Commissions Law to establish, whenever it deems advisable, a uniform system of accounts to be used by railroad corporations subject to its jurisdiction, and it appearing advisable to estab-

lish at this time a uniform system of accounts for expenditures for road and equipment, operating revenues, operating expenses, locomotive miles, car miles and train miles,

Ordered, 1. That the system of accounts shown by Schedule A, hereto annexed, be and the same hereby is established as the system of accounts for said matters, to be kept and maintained by all railroad corporations under the supervision of this Commission, as that term is defined in section 2 of the Public Service Commissions Law, owning, controlling or operating any railroad on which steam is used as the motive power.

2. That said system of accounts shall be put in use by all such railroad corporations on the 1st day of January, 1908, and be thereafter kept and used by them.

3. That all such railroad corporations shall, in the annual reports to be severally made by them concerning their respective affairs and operations, during the fiscal year July 1, 1907, to June 30, 1908, inclusive, classify and report their expenditures for road and equipment, their operating revenues, their operating expenses and their locomotive miles, car miles and train miles, in accordance with the classifications of expenditures for road and equipment, of operating revenues, of operating expenses and of locomotive miles, car miles and train miles, set forth in said Schedule A.

4. That the form of the annual report to be made by the said railroad corporations, showing their respective affairs and operations during the said year, shall call for the total amounts charged or credited to each of the several accounts provided for in the said several classifications.

5. That the secretary of this Commission serve upon each of the said corporations, persons and associations, on December 31, 1907, in the manner prescribed by law, a copy of this order.

In the Matter of The Hearing on the Motion of the Commission as to the Regulations, Practices, Equipment and Service of the LONG ISLAND RAILROAD COMPANY in the Respects Hereinafter Mentioned. Under order for hearing No. 100 made November 20, 1907.	ORDER No. 181.— ISSUED DECEMBER 31, 1907.

This matter coming on upon the report of the hearing had herein on the 2d day of December, 1907, and it appearing that the said hearing was held by and pursuant to an order of this Commission, No. 100, made November 20, 1907, and returnable on the 2d day of December, 1907, and that the said order was duly served upon the Long Island Railroad Company, and that the said service was by it duly acknowledged, and that the said hearing was held

by and before the Commission on the matters in said order specified on the 2d day of December, 1907, and by adjournment duly had on the 16th day of December, 1907, and at each of said sessions Mr. Commissioner McCarroll, presiding, and proof being taken, and Grosvenor H. Backus, Esq., assistant counsel, appearing for the Commission at each of said sessions, and Joseph F. Keany, Esq., appearing for said Long Island Railroad Company,

Now, It being made to appear after the proceedings upon the said hearing that the service of the Long Island Railroad Company in the transportation of persons in the first district on its line operating between Long Island City and East New York has been and is unreasonable and inadequate in that said company does not operate enough trains between Long Island City and East New York reasonably to accommodate the traffic offered for transportation to said company, and it being made to appear after said proceedings that it is reasonably necessary for the accommodation and transportation of the passengers offering themselves for transportation, and is and will be just, reasonable and proper that the said service of the said Long Island Railroad Company on said line between Long Island City and East New York should be supplemented and changed in the particulars hereinafter set forth upon the lines, at the points and at the times so hereinafter set forth,

Therefore, On motion of Abel E. Blackmar, Esq., Counsel to the Commission, it is

Ordered, That the service of the Long Island Railroad Company, on its line between Long Island City and East New York, be supplemented and changed as follows, namely:

That in addition to the service now operated by said railroad company over its Manhattan Beach division, said company operate a train from East New York to Long Island City, which shall leave East New York between 6:10 a. m. and 6:30 a. m., and a train from East New York to Long Island City, which shall leave East New York between 7:10 a. m. and 7:30 a. m., and also a train from Long Island City to East New York, which shall leave Long Island City between 5:50 p. m. and 6:10 p. m.; and that each of said trains shall stop regularly at the Bushwick avenue, Cypress avenue and Myrtle avenue stations on said Manhattan Beach division of said Long Island Railroad Company, said additional trains to be put into regular operation not later than the 13th day of January, 1908, and to continue in operation, daily except Sundays, until the 19th day of June, 1908, or until such other date as said company puts its summer schedule for the season of 1908 into operation on said Manhattan Beach division; and it is further

Ordered, That this order shall take effect immediately and shall continue in force until the said date of the establishment of the summer schedule for 1908, but without prejudice to an order for further or additional hearing and action thereon by the Commission in respect of anything herein prescribed prior to said 19th day of June, 1908; and it is further

Ordered, That on or before the 6th day of January, 1908, the Long Island Railroad Company notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

In the Matter of the Complaint of JOHN DAVIS, Complainant,

against

UNION RAILWAY COMPANY OF NEW YORK CITY, Defendant.

ORDER NO. 182 — ISSUED DECEMBER 31, 1907.

This matter coming on upon the complaint of John Davis, bearing date November 19, 1907, and the answer thereto of said Union Railway Company, bearing date December 9, 1907, and the report of the hearing had thereon on the 26th and 27th days of December, 1907, and it appearing that said hearing was held by and pursuant to an order of the Commission made and entered December 16, 1907, returnable December 26, 1907, at 2 o'clock p. m., and that said order was duly served upon the said Union Railway Company, and that said hearing was held by and before this Commission on the matters specified in said complaint and answer and in said order for hearing on the said 26th and 27th days of December, 1907, Commissioner Eustis, presiding, Oliver C. Semple, Esq., assistant counsel, appearing for the Commission, and Mr. Edward A. Maher, president, and Ambrose F. McCabe, attorney, appearing for said Union Railway Company,

Now, It being made to appear by the said complaint, answer, and after the proceedings on said hearing that the regulations and practices of said Union Railway Company in respect to rates and charges for transportation of passengers in the first district are unjust, unreasonable and improper, and that it will be just, reasonable and proper to require changes in the said regulations and practices as affecting said rates and charges for transportation by said company in the particulars hereinafter set forth,

On motion of Abel E. Blackmar, Counsel for the Commission, it is

Ordered, That the Union Railway Company of New York City, on every car on its Williamsbridge line, west bound on Tremont avenue (One Hundred and Seventy-seventh street), ask of each person becoming a passenger thereon, at any point west of Morris Park avenue and paying fare, whether such passenger wishes a transfer slip for continuance of his trip north or south, and deliver such transfer slip accordingly to such passenger prior to or on leaving said car at Third avenue and One Hundred and Seventy-seventh street; and it is further

Ordered, That this order shall take effect the 10th day of January, 1908, and shall continue in force from and after the taking effect of the same until otherwise ordered by the Commission; and it is further

Ordered, That within five days after the service of this order upon the said Union Railway Company, the said Union Railway Company notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

JOHN H. MACCRACKEN, Complainant,

against

NEW YORK CITY INTERBOROUGH RAILWAY COMPANY, Defendant.

ORDER NO. 183.— ISSUED DECEMBER 31, 1907.

This matter coming on upon the report of the hearing had herein on the 3d day of December, 1907, and it appearing that the said hearing was held by and pursuant to an order of this Commission made the 20th day of November, 1907, upon the complaint and answer herein, and that the said order was duly served upon John H. MacCracken, complainant, and upon the New York City Interborough Railway Company, defendant, and that the said service upon the said company was by such company duly acknowledged, and that the said hearing was held by and before the Commission on the matters in said complaint, answer and order specified on the 3d day of December, 1907, at which session Mr. Commissioner Eustis presided, and LeRoy T. Harkness, Esq., assistant counsel, appeared for the Commission, and Alfred A. Gardner, Esq., appeared for the New York City Interborough Railway Company, and proof having been taken upon the matters specified in the complaint, answer and order;

And it appearing, After the hearing that the New York City Interborough Railway Company is a street railroad corporation operating certain lines in the borough of the Bronx, in the city of New York, with a terminus at One Hundred and Eighty-first street and St. Nicholas avenue, where it receives a large number of passengers from the Interborough Rapid Transit Company, a corporation operating the rapid transit road known as the subway, in the borough of the Bronx, under an agreement with the said Interborough Rapid Transit Company, providing for the sale and acceptance by both parties of transfers either from the subway to the street railroad company, or from the street railroad company to the subway, which are issued by both companies on the payment of three cents (3¢) in addition to the regular fare of five cents (5¢) upon either of said roads; that the New York City Interborough Railway Company provides no waiting accommodations upon the surface for passengers transferring from the subway to its road, and that the space in the subway station at One Hundred and Eighty-first street, at the head of the elevator shafts, is improper, unsafe and inadequate for such a purpose, and that the lack of safe and adequate waiting accommodations at the street surface at One Hundred and Eighty-first street and St. Nicholas avenue is the cause of suffering and inconvenience, and is dangerous to the health of the traveling public;

And it appearing, That the changes and improvements in the equipment and service of the company, as set forth below, are just, reasonable, safe, adequate and proper and ought reasonably to be made to promote the security

and convenience of the public and to secure adequate service and facilities for the transportation of passengers;

Therefore, On motion of Abel E. Blackmar, Esq., Counsel to the Commission, it is

Ordered, That the New York City Interborough Railway Company shall either construct a proper, substantial and adequate waiting room or shelter for passengers transferring from the subway to its lines at One Hundred and Eighty-first street and St. Nicholas avenue, at a point on a level with such street railway tracks and not more than fifty feet distant therefrom, or, at its election, at all times during the day and night hold at such point a car for the use of waiting passengers until the arrival of the next or succeeding car, either of the same or different lines.

It is further ordered, That the said company be required, within ten days after the service of this order, to advise the Commission which of these courses it elects to pursue, and in case it elects to erect such waiting room or shelter, as above provided, it shall, within twenty days after the service of this order upon it, proceed with the preparation of the necessary plans and the construction of such waiting room or shelter and shall complete the same with the utmost despatch, or if it elects to hold a car until the arrival of a succeeding car, as above provided, it shall put such plan into operation within such twenty days.

It is further ordered, That this order shall take effect at once; but the time within which such changes and improvements shall be made shall be the periods hereinbefore provided.

This order shall continue in force for a period of two years from and after its date, but without prejudice to an order for further or additional hearings and action thereon by the Commission in respect of anything herein prescribed or in respect of anything covered by the order for hearing herein prior to the expiration of said period of two years.

And it is further ordered, That on or before the 10th day of January, 1908, the said New York City Interborough Railway Company shall notify the Public Service Commission for the First District whether the terms of this order are accepted and will be obeyed.

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